

SCAN  
ANTENNA®

WHEN CONNECTIVITY MATTERS



Connecting the world since 1947

## Your complete antenna systems provider

SCAN Antenna is a supplier of complete antenna systems. With factories in Denmark and Spain we produce high quality antennas for all markets such as ...

- Maritime
- Telecom
- Aviation
- Transport
- Security
- Satellite systems
- ....and much more.



We differentiate ourselves from our competitors in the way that we continuously work on being even better, making our products the very best you can get.

Looking for antennas for maritime use? Do not look any further. Marine communication antennas have formed the core of our business for more than 30 years, and we have a strong focus to ensure SCAN Antenna is your lifeline on the water.

Our factory in Spain is already working in accordance with ISO 9001, and here we develop high quality accessories for antenna systems such as combiners, filters, DAS and much more.

You can order everything you need for your complete antenna system at our sales department. With more than 40 years of experience in antenna and accessories production we know that accuracy, flexibility and reliability is crucial to our clients.

We are renowned for our service, knowledge and outstanding quality in all parts of an antenna system.

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WHEN CONNECTIVITY MATTERS

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## ANTENNAS & FILTERS FOR BUSINESS AND MISSION CRITICAL USE

For Critical communication you need quality antennas on the mobile terminal and for the base stations in your system.

Wireless communication is increasingly becoming not only a reliable voice medium, but also essential for data and video to support the mission critical decisions.

The base station antennas are designed with different gain for special applications and cover all use (Consumer, Short-range industrial or Professional/Business-Critical applications or Public Safety/Mission-Critical applications).

Airband / TETRA / P25 / PMR / DMR / outdoor / LTE800 / Wideband / High Power



## BASE STATION ANTENNAS & FILTERS

## HIGH POWER BASE STATION ANTENNAS

### Unity Gain Omni-Directional

#### HPBASE001(VHF) / HPBASE004(UHF)

High power base station antennas for 150 MHz or 450 MHz with integrated multipurpose mounting bracket comes with a generous bandwidth which reduces the need for multiple antennas both in stock and on installation sites.

Frequency	VHF: 112 – 178 MHz / UHF 380 – 530 MHz
Power	500 Watt
Mounting Type	Fixed Tube Mounting Bracket. Stainless Steel Mounting Hardware included.
Mounting Place	On vertical or horizontal mast tube (Ø 30 – 60 mm)
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



Model	Frequency (MHz)	GAIN dBd (dBi)	Height (mm)	Item no.
<b>HPBASE01-A</b> - in Carton tube	112-129	0 (2,15)	1855	25001-012A
<b>HPBASE01-B</b> - in Carton tube	118-137	0 (2,15)	1518	25001-012B
<b>HPBASE01-C</b> - in Carton tube	133-151	0 (2,15)	1575	25001-012C
<b>HPBASE01-D</b> - in Carton tube	144-170	0 (2,15)	1445	25001-012D
<b>HPBASE01-E</b> - in Carton tube	153-178	0 (2,15)	1425	25001-012E
<b>HPBASE004-A</b> - in Carton tube	380-445	0 (2,15)	1032	26004-012A
<b>HPBASE004-B</b> - in Carton tube	399-476	0 (2,15)	1005	26004-012B
<b>HPBASE004-C</b> - in Carton tube	430-530	0 (2,15)	947	26004-012C



Omnidirectional Base Station Antenna with Heavy-Duty-Fiberglass Radome and sturdy mounting bracket for the UHF / TETRA 380-512 MHz



BC390-1G HD is a 0 dBd gain, Heavy duty, omnidirectional coaxial base station antenna for the 380-512 MHz Band. It is designed for mounting on supporting tubes with outer diameter between 27 mm and 60 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.



SPECIFICATIONS

**ELECTRICAL**

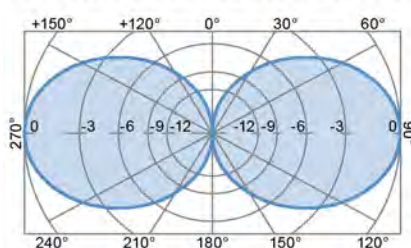
Frequency Range	380-512 MHz
Band width	100 MHz
SWR	< 2.0
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	300 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Intermodulation (PIM)	<- 153 dBc (3rd order for 2x43 dBm carriers)
-3 dB Beamwidth	Vertical 85° / Horizontal 360°
Connector	4.3-10 F , 7/16 F optional

**MECHANICAL**

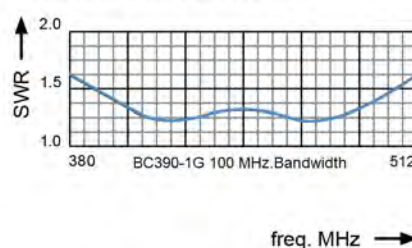
Protection	IP 66
Weight	2.8 kg
Mounting	27 - 60 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	200 Km/h
Dimensions mm	L 1400, Dia 150

ORDERING DESIGNATIONS: When ordering, please, specify an exact Tx frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE



Omnidirectional Base Station Antenna with Heavy-Duty-Fiberglass Radome and sturdy mounting bracket for the UHF / TETRA 380-512 MHz



BC390-3G HD is a 3 dBd gain, Heavy duty, omnidirectional collinear base station antenna for the 380-512 MHz Band. It is designed for mounting on supporting tubes with outer diameter between 27 mm and 660 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.



SPECIFICATIONS

**ELECTRICAL**

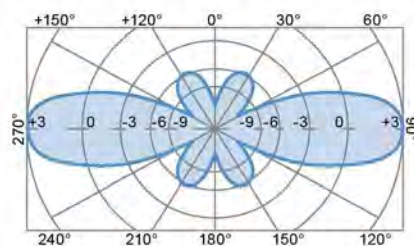
Frequency Range	380-512 MHz
Band width	20 MHz
SWR	< 1.5
Gain	3 dBd (5.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Intermodulation (PIM)	-153 dBc (3 rd. order for 2 43dBm carriers)
-3 dB Beamwidth	Vertical 32 ° / Horizontal 360°
Downtilt optional	5°, 8°
Connector	4.3-10 , 7/16 optional

**MECHANICAL**

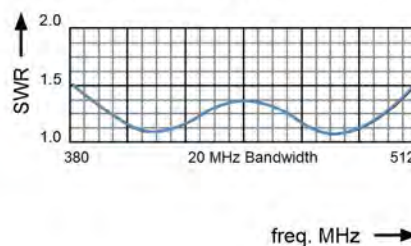
Protection	IP 66
Weight	3.1 kg
Mounting	27 - 660 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	200 Km/h
Dimensions mm	L 1800, Dia 150

ORDERING DESIGNATIONS: When ordering, please, specify an exact Tx frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE



Omnidirectional Base Station Antenna with Heavy-Duty-Fiberglass Radome and sturdy mounting bracket for the UHF / TETRA 380-512 MHz



BC390-6g HD is a 6 dBd gain, Heavy Duty, omnidirectional collinear base station antenna for the 380-470 MHz Band. It is designed for mounting on supporting tubes with outer diameter between 27 mm and 60 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.



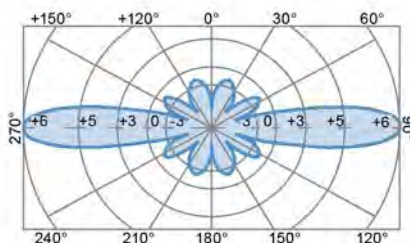
SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Band width	20 MHz
SWR	< 1.5
Gain	6 dBd (8.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Intermodulation (PIM)	<-153 dBc (3 rd. order for 2 43dBm carrier)
-3 dB Beamwidth	Vertical 18° / Horizontal 360°
Downtilt Optional	5°, 6°, 8°
Connector	4.3-10 F , 7/16 F optional

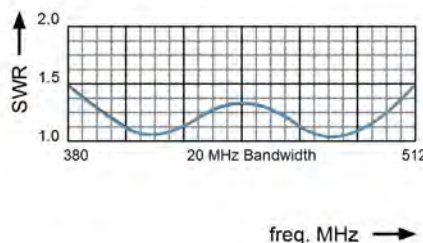
MECHANICAL	
Protection	IP 66
Weight	6.1 kg
Mounting	27 - 660 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	200 Km/h
Dimensions mm	L 3600, Dia 150

ORDERING DESIGNATIONS: When ordering, please, specify an exact Tx frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE







BC4-1G W is a 0 dBd gain, omnidirectional rod-type base station antenna for the 44-88 MHz Band. Is designed for mounting on supporting tubes with outer diameter between 27 mm and 50 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.



SPECIFICATIONS

ELECTRICAL

Frequency Range	44-88 MHz
Band width	10 MHz
SWR	< 1.5
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

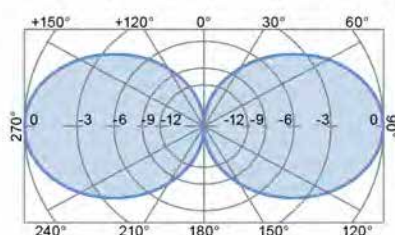
MECHANICAL

Weight	5.5 kg
Mounting	27 - 50 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	55 M/S

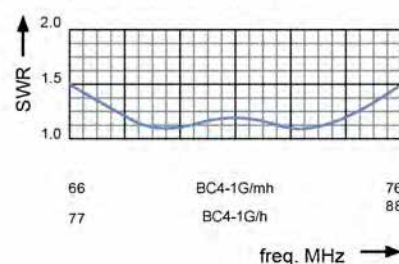
TYPE FREQUENCY

BC4-1G/l	44-55 MHz
BC4-1G/ml	56-65 MHz
BC4-1G/mh	66-76 MHz
BC4-1G/h	77-88 MHz

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE



## VHF 150 MHz OMNI-BASE ANTENNAS (2-5 dBi)

### VHF Omni-Directional – Integrated Fixed bracket

#### BASE001/BASE301

VHF 150 MHz base station antennas with integrated multipurpose mounting bracket comes with a generous bandwidth which reduces the need for multiple antennas both in stock and on installation sites.

Frequency	118 – 225 MHz
Power	150 Watt
Mounting Type	Fixed Tube Mounting Bracket. Stainless Steel Mounting Hardware included.
Mounting Place	On vertical or horizontal mast tube (Ø 30 – 60 mm)
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)

Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
<b>BASE001-A</b> - in Carton tube	118-137	0 (2,15)	1500	22010-004A
<b>BASE001-B</b> - in Carton tube	128-144	0 (2,15)	1400	22010-004B
<b>BASE001-C</b> - in Carton tube	144-163	0 (2,15)	1400	22010-004C
<b>BASE001-D</b> - in Carton tube	154-174	0 (2,15)	1400	22010-004D
<b>BASE001-E</b> - in Carton tube	218-225	0 (2,15)	940	22010-004E
<b>BASE001-X</b> - in Carton tube	118-174	0 (2,15)	1500	*22010-004X
<b>BASE301-A</b> - in Carton tube	118-124	3 (5,15)	3500	22310-004A
<b>BASE301-B</b> - in Carton tube	124-130	3 (5,15)	3500	22310-004B
<b>BASE301-C</b> - in Carton tube	130-136	3 (5,15)	3100	22310-004C
<b>BASE301-D</b> - in Carton tube	136-142	3 (5,15)	3100	22310-004D
<b>BASE301-E</b> - in Carton tube	142-149	3 (5,15)	3100	22310-004E
<b>BASE301-F</b> - in Carton tube	149-156	3 (5,15)	2700	22310-004F
<b>BASE301-G</b> - in Carton tube	156-163	3 (5,15)	2700	22310-004G
<b>BASE301-H</b> - in Carton tube	163-174	3 (5,15)	2700	22310-004H
<b>BASE301-K</b> - in Carton tube	218-225	3 (5,15)	2700	22310-004K
<b>BASE301-X</b> - in Carton tube	118-174	3 (5,15)	3500	*22310-004X

\* For X version: Approx. 5 % of the specified Centre Freq (CF)





BC2-1G is a 0 dBd gain, omnidirectional rod-type base station antenna for the 136-174 MHz Band. Is designed for mounting on supporting tubes with outerdiameter between 27 mm and 50 mm The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna – sturdy and strong.

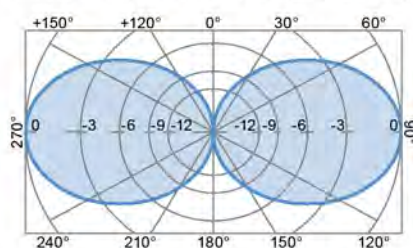


SPECIFICATIONS

ELECTRICAL	
Frequency Range	136-174 MHz
Band width	40 MHz <
SWR	1.5
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight & Dimensions	3.2 kg L . 2880 mm ; Dia150 mm.
Mounting	27 - 50 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	55 M/S

ORDERING DESIGNATIONS: When ordering, please, specify an exact frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE





BC2-1G Air is a 0 dBd gain, omnidirectional rod-type base station antenna for the 118-144 MHz Band. Is designed for mounting on supporting tubes with outer diameter between 27 mm and 50 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long life-time has been taken into consideration when designing this antenna - sturdy and strong



## SPECIFICATIONS

### ELECTRICAL

Frequency Range	118-144 MHz
Band width	20 MHz
SWR	< 1.5
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

### MECHANICAL

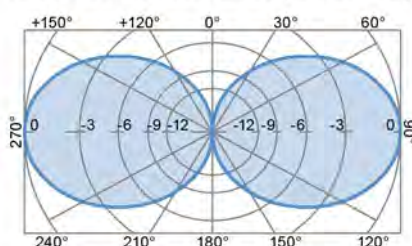
Weight & Dimensions	3.6 kg L : 3200 mm ; W: 150 mm.
Mounting	27 - 50 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	55 M/S

### TYPE

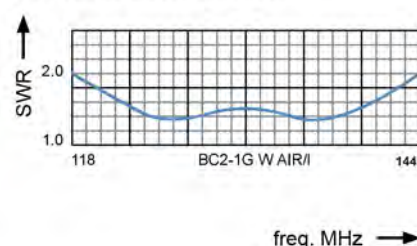
### FREQUENCY

BC2-1G AIR/I	118-136 MHz
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RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE





BC2-3G is a 3 dBd gain, omnidirectional rod-type base station antenna for the 136 -174 MHz Band. Is designed for mounting on supporting tu-tubes with outer diameter between 27 mm and 50 mm The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in ali climates. The atmospherical discharges are immediate-ly led to ground as ali metal parts are DC-connected. Therefore, the an-tenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.

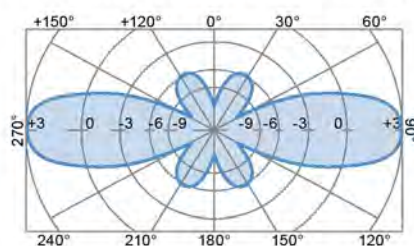


SPECIFICATIONS

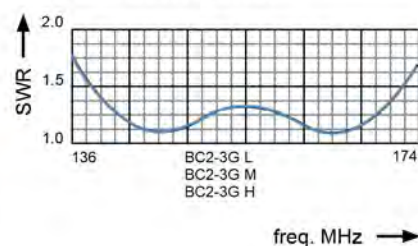
ELECTRICAL	
Frequency Range	136-174 MHz
Band width	10MHz
SWR	< 1.5
Gain	3 dBd (5.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight & Dimensions	2.3 kg L:2800 mm W : 150 mm
Mounting	27 - 50 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind	55 M/S

ORDERING DESIGNATIONS: When ordering, please, specify an exact frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE





BC2-45G is a 4,5 dBi gain, omnidirectional rod-type base station antenna for the 136 -174 MHz Band. Is designed for mounting on supporting tubes with outer diameter between 27 mm and 50 mm The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.



SPECIFICATIONS

ELECTRICAL

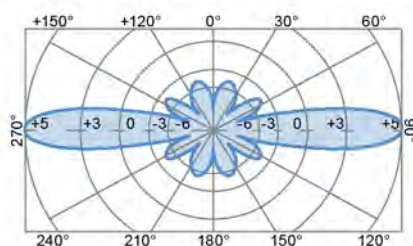
Frequency Range	136 -174 MHz
Band width	10 MHz
SWR	< 1.5
Gain	4.5 dBi
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

MECHANICAL

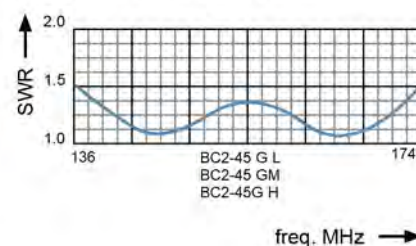
Weight & Dimensions	4.2 kg	L: 4500	W:150mm
Mounting	27 - 50 mm mast tube		
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum		
Wind Load	55 M/S		

ORDERING DESIGNATIONS: When ordering, please, specify an exact frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE



## 450 MHz OMNI-BASE ANTENNAS (2-7 dBi)

### UHF Omni-Directional Antennas- Integrated Fixed bracket

#### BASE004/BASE304/BASE504

UHF 450 MHz base station antennas with integrated multipurpose mounting bracket comes with a generous bandwidth which reduces the need for multiple antennas both in stock and on installation sites.

Frequency	330 - 512 MHz
Power	250 - 300 Watt (depending on model)
Mounting Type	Fixed Tube Mounting Bracket. Stainless Steel Mounting Hardware included.
Mounting Place	On vertical or horizontal mast tube (Ø 30 - 60 mm)
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)

Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
<b>BASE004-G</b> - in Carton tube	330-360	0 (2,15)	1190	23004-004F
<b>BASE004-F</b> - in Carton tube	380-400	0 (2,15)	1190	23004-004F
<b>BASE004-A</b> - in Carton tube	406-426	0 (2,15)	1190	23004-004A
<b>BASE004-B</b> - in Carton tube	420-440	0 (2,15)	900	23004-004B
<b>BASE004-C</b> - in Carton tube	430-450	0 (2,15)	900	23004-004C
<b>BASE004-D</b> - in Carton tube	449-471	0 (2,15)	900	23004-004D
<b>BASE004-E</b> - in Carton tube	468-492	0 (2,15)	900	23004-004E
<b>BASE004-X</b> - in Carton tube	406-512	0 (2,15)	1190	*23004-004X
<b>BASE304-A</b> - in Carton tube	380-400	3 (5,15)	1600	23304-004A
<b>BASE304-B</b> - in Carton tube	406-430	3 (5,15)	1500	23304-004B
<b>BASE304-C</b> - in Carton tube	410-430	3 (5,15)	1500	23304-004C
<b>BASE304-D</b> - in Carton tube	417-450	3 (5,15)	1500	23304-004D
<b>BASE304-E</b> - in Carton tube	434-450	3 (5,15)	1400	23304-004E
<b>BASE304-F</b> - in Carton tube	440-470	3 (5,15)	1400	23304-004F
<b>BASE304-G</b> - in Carton tube	467-485	3 (5,15)	1400	23304-004G
<b>BASE304-H</b> - in Carton tube	485-503	3 (5,15)	1360	23304-004H
<b>BASE304-X</b> - in Carton tube	406-512	3 (5,15)	1600	*23304-004X
<b>BASE504-A</b> - in Carton tube	380-410	5 (7,15)	2250	23504-004A
<b>BASE504-B</b> - in Carton tube	400-430	5 (7,15)	2250	23504-004B
<b>BASE504-C</b> - in Carton tube	420-450	5 (7,15)	2250	23504-004C
<b>BASE504-D</b> - in Carton tube	440-470	5 (7,15)	2250	23504-004D

\* For X version: Approx. 5 % of the specified Centre Freq (CF)



## 450 MHz LIGHT WEIGHT WIDEBAND OMNI-ANTENNA

### UHF Broadband Unity Gain Omni-Antenna – Integrated Fixed bracket

#### UHF004

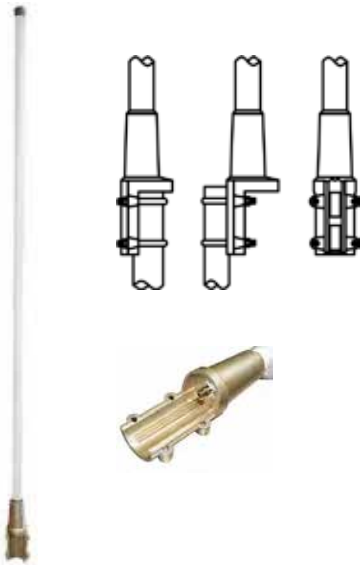
Light weight wideband UHF 450 MHz Omni-Directional antenna with integrated multipurpose mounting bracket. Comes with a generous bandwidth which reduces the need for multiple antennas both in stock and on installation sites.

Frequency	330 – 510 MHz (covered by 4 models)
Bandwidth	50 MHz
Gain	0 dBd (2,15 dBi)
Power	200 Watt
Mounting Type	Fixed Tube Mounting Bracket. Stainless Steel Mounting Hardware included.
Mounting Place	On vertical or horizontal mast tube (Ø 30 – 60 mm)
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)

Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
<b>UHF004-A</b> - in polybag	330-380	0 (2,15)	700	23005-001A
<b>UHF004-B</b> - in polybag	380-430	0 (2,15)	700	23005-001B
<b>UHF004-C</b> - in polybag	420-470	0 (2,15)	700	23005-001C
<b>UHF004-D</b> - in polybag	460-510	0 (2,15)	700	23005-001D
<b>UHF004-A</b> - in Carton tube	330-380	0 (2,15)	700	23005-001A
<b>UHF004-B</b> - in Carton tube	380-430	0 (2,15)	700	23005-001B
<b>UHF004-C</b> - in Carton tube	420-470	0 (2,15)	700	23005-001C
<b>UHF004-D</b> - in Carton tube	460-510	0 (2,15)	700	23005-001D







BC70-1G is a 0 dBd gain, omnidirectional rod-type base station antenna for the 380-512 MHz Band. Is designed for mounting on supporting tubes with outerdiameter between 27 mm and 50 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates.

This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.



## SPECIFICATIONS

### ELECTRICAL

Frequency Range	380-512 MHz
Band width	60 MHz
SWR	< 1.5
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

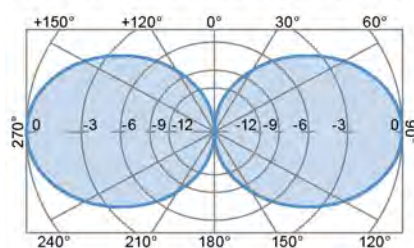
### MECHANICAL

Weight & Dimensions	0.8 kg ;	L: 850 mm	W: 150 mm
Mounting	27 - 40 mm mast tube		
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum		
Wind Load	55 M/S		

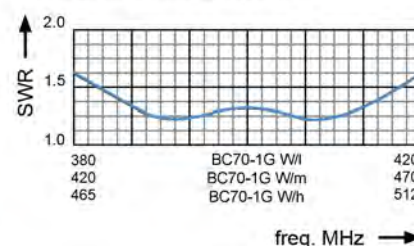
### TYPE FREQUENCY

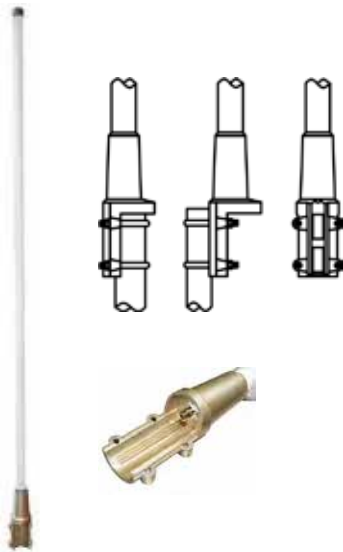
BC70-1G/l	380-420 MHz
BC70-1G/m	420-470 MHz
BC70-1G/h	465-512 MHz

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE





BC70-3G is a 3 dBd gain, omnidirectional rod-type base station antenna for the 380 - 512 MHz Band. Is designed for mounting on supporting tubes with outer diameter between 27 mm and 50 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.



SPECIFICATIONS

ELECTRICAL

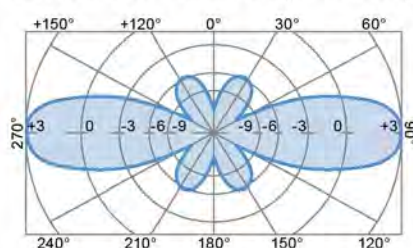
Frequency Range	380 - 512 MHz
Band width	20 MHz
SWR	< 1.5
Gain	3 dBd (5.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

MECHANICAL

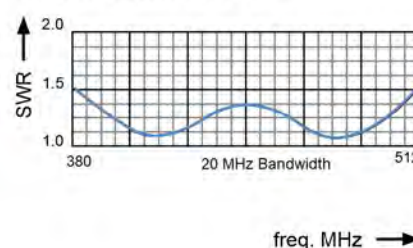
Weight & Dimensions	1.6 kg ;                      L:3400 mm    W: 150mm
Mounting	27 -60 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	55 M/S

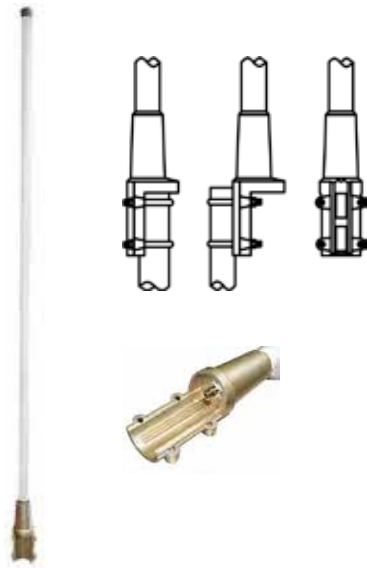
ORDERING DESIGNATIONS: When ordering, please, specify an exact frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE





BC70-5G is a 5 dBd gain, omnidirectional rod-type base station antenna for the 380-470 MHz Band. Is designed for mounting on supporting tubes with outer diameter between 27 mm and 50 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.



SPECIFICATIONS

ELECTRICAL

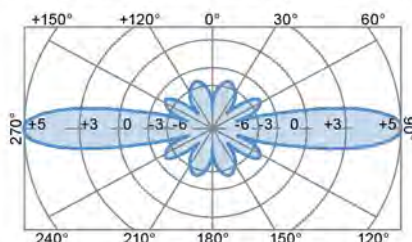
Frequency Range	380-512 MHz
Band width	20 MHz
SWR	< 1.5
Gain	5 dBd (7.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

MECHANICAL

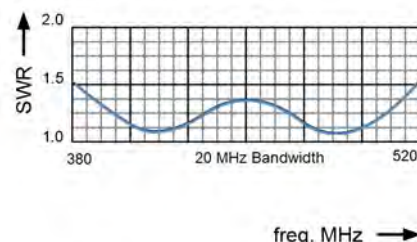
Weight & Dimensions	3.0 kg ; L: 3200 mm W: 150 mm
Mounting	27 - 50 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	50M/S

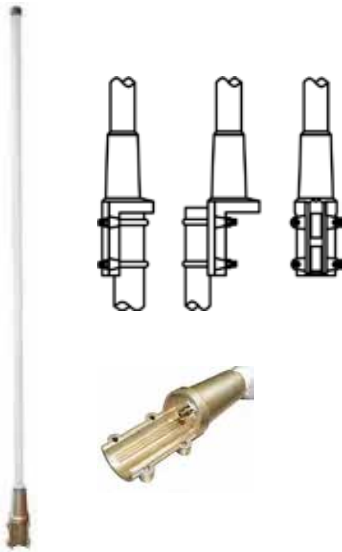
ORDERING DESIGNATIONS: When ordering, please, specify an exact frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE





BC70-3G is a 7 dBd gain, omnidirectional rod-type base station antenna for the 380-512 MHz Band. Is designed for mounting on supporting tubes with outer diameter between 27 mm and 50 mm. The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube. The fiberglass tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates. The atmospheric discharges are immediately led to ground as all metal parts are DC-connected. Therefore, the antenna shows a DC-short across the coaxial cable. This antenna is used where reliability is of great importance. A long lifetime has been taken into consideration when designing this antenna - sturdy and strong.

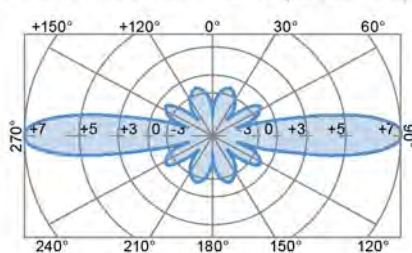


SPECIFICATIONS

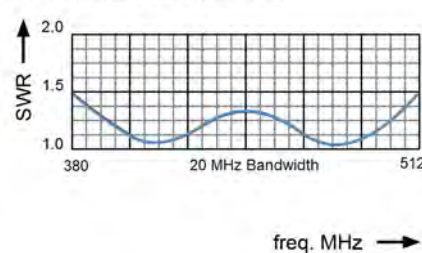
ELECTRICAL	
Frequency Range	380-512 MHz
Band width	20 MHz
SWR	< 1.5
Gain	7 dBd (9.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight & Dimensions	4.1 kg ; L: 4500 mm W: 150 mm
Mounting	27 - 50 mm mast tube
Material	Radome: fiberglass   Mounting Bracket: Epoxy coated aluminum
Wind Load	55 M/S

ORDERING DESIGNATIONS: When ordering, please, specify an exact frequency.

RADIATION PATTERN (E-PLANE)



TYPICAL SWR CURVE



## 450 MHz LIGHT WEIGHT WIDEBAND OMNI-ANTENNA

### UHF Broadband Unity Gain Omni-Antenna – (G1"-11 thread)

#### UHF44

Light weight wideband UHF 450 MHz Omni-Directional antenna with 1" threaded pole (G1"-11 thread), can be used with revolving Nut Kit or on optionally brackets. Comes with a generous bandwidth which reduces the need for multiple antennas both in stock and on installation sites.

Frequency	330 – 510 MHz (covered by 4 models)
Bandwidth	50 MHz
Gain	0 dBd (2,15 dBi)
Power	200 Watt
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Mounting Place	On vertical or horizontal mast tube (Ø 30 – 60 mm)
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
<b>UHF44-A</b> - in polybag	330-380	0 (2,15)	640	14044-001A
<b>UHF44-B</b> - in polybag	380-430	0 (2,15)	640	14044-001B
<b>UHF44-C</b> - in polybag	420-470	0 (2,15)	640	14044-001C
<b>UHF44-D</b> - in polybag	460-510	0 (2,15)	640	14044-001D
<b>UHF44-A</b> - in Carton tube	330-380	0 (2,15)	640	14044-001A
<b>UHF44-B</b> - in Carton tube	380-430	0 (2,15)	640	14044-001B
<b>UHF44-C</b> - in Carton tube	420-470	0 (2,15)	640	14044-001C
<b>UHF44-D</b> - in Carton tube	460-510	0 (2,15)	640	14044-001D



10000-183 Mount



10000-133 Mount



10000-141 Mount

## 450 MHz OMNI ANTENNAS (2-7 dBi)

### UHF Omni-Directional Antennas- (G1"-11 thread)

#### UHF43/UHF46/UHF49

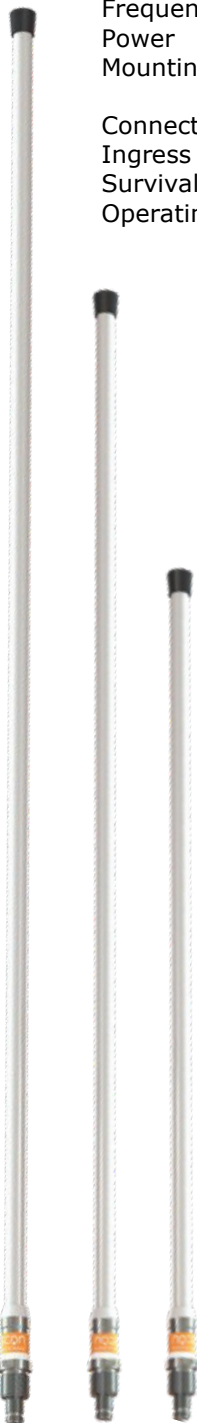
UHF 450 MHz base station antennas with 1" threaded pole (G1"-11 thread), can be used with revolving Nut Kit or on optionally brackets. Comes with a generous bandwidth which reduces the need for multiple antennas both in stock and on installation sites.

Frequency	330 – 512 MHz
Power	250 Watt
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)

Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
<b>UHF43A</b> - in Carton tube	380-400	0 (2,15)	1145	14043-002A
<b>UHF43B</b> - in Carton tube	406-430	0 (2,15)	1145	14043-002B
<b>UHF43C</b> - in Carton tube	425-450	0 (2,15)	855	14043-002C
<b>UHF43D</b> - in Carton tube	445-470	0 (2,15)	855	14043-002D
<b>UHF43E</b> - in Carton tube	330-360	0 (2,15)	1145	14043-002D
<b>UHF43X</b> - in Carton tube	396-512	0 (2,15)	1145	14043-002X
<b>UHF46A</b> - in Carton tube	380-400	3 (5,15)	1540	14046-002B
<b>UHF46B</b> - in Carton tube	410-430	3 (5,15)	1440	14046-002C
<b>UHF46C</b> - in Carton tube	430-500	3 (5,15)	1440	14046-002D
<b>UHF46D</b> - in Carton tube	450-470	3 (5,15)	1340	14046-002D
<b>UHF46X</b> - in Carton tube	380-512	3 (5,15)	1540	14046-002X
<b>UHF49A</b> - in Carton tube	380-410	5 (7,15)	2132	14049-002B
<b>UHF49B</b> - in Carton tube	400-430	5 (7,15)	2132	14049-002C
<b>UHF49C</b> - in Carton tube	420-450	5 (7,15)	2132	14049-002D
<b>UHF49D</b> - in Carton tube	440-470	5 (7,15)	2132	14049-002D

If 1" Revolving Nut Kit is needed with antenna: Change above listed P/N to xxxxx-**432** for kit in tube

\* For X version: Approx. 5 % of the specified Centre Freq (CF)



10000-183 Mount



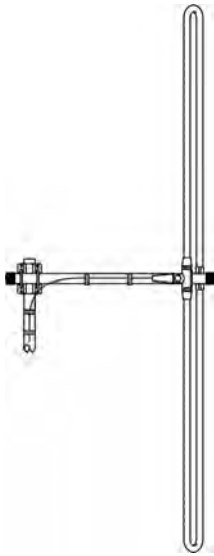
10000-133 Mount



10000-173 Mount



10102-003 Mount



Single, 0 dBd folded dipole incorporating a balun optimized for wide bandwidth and accurate matching. The entire balun unit and feeder terminations are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections.

The dipole element, the supporting boom and the adjoining metal castings have been constructed in high quality aluminum alloys to prevent corrosion. All metal parts are DC-grounded. The antenna is supplied with clamp for mounting on 27-50 mm diameter mast tubes.



SPECIFICATIONS

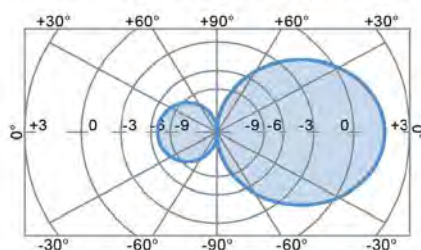
ELECTRICAL

Frequency Range	66-88 MHz
Band width	19 MHz
SWR	< 1.5
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

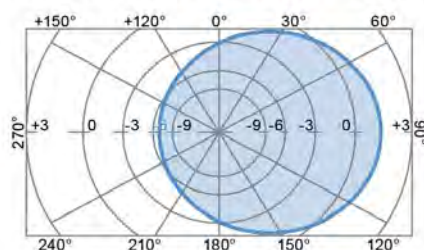
MECHANICAL

Weight	3.5 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S

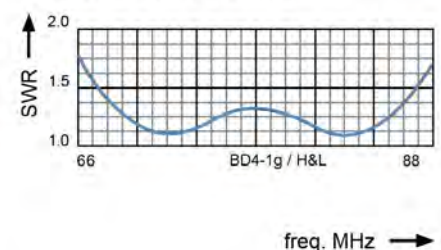
RADIATION PATTERN (E-PLANE)

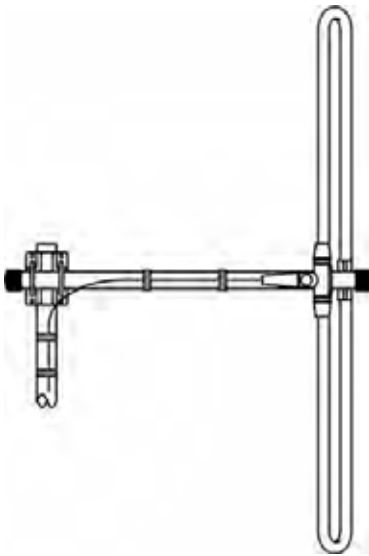


RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





Single, 0 dBd folded dipole incorporating a balun optimized for wide bandwidth and accurate matching. The entire balun unit and feeder terminations are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections.

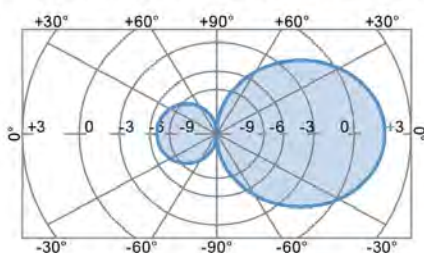
The dipole element, the supporting boom and the adjoining metal castings have been constructed in high quality aluminum alloys to prevent corrosion. All metal parts are DC-grounded. The antenna is supplied with clamp for mounting on 27-50 mm diameter mast tubes.



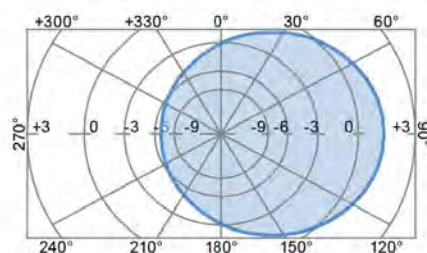
**SPECIFICATIONS**

ELECTRICAL	
Frequency Range	136 - 174 MHz
Band width	20 MHz
SWR	< 1.5
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	2.7 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BD2-1G/l	144-164 MHz
BD2-1G/h	154-174 MHz

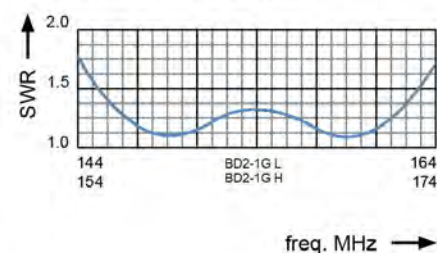
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE







The LAMBDA BD2-3G - is a two folded dipole elements wide band VHF antenna for professional radio systems. All antenna parts are made of aluminum and covered with polymer powdered protecting coating. All components of dipole element are DC grounded for better lightning and antistatic protection.

The supporting mast doesn't include into ordering package.



SPECIFICATIONS

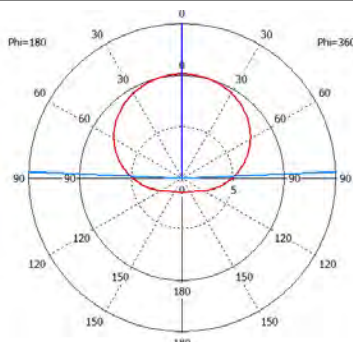
**ELECTRICAL**

Frequency Range	136–174 MHz
Band width	40 MHz
SWR	< 1.5
Gain, dBd (1/4 dipole to mast spacing)	3
Gain, dBd (3/8 dipole to mast spacing)	5.6
Max. Power	200 W
Impedance	50 Ω
Connector	N (female)
Vertical beamwidth (3/8 spacing)	38°
Lightning protection	DC-grounded

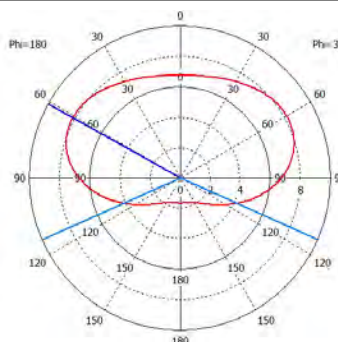
**MECHANICAL**

Elements	2
Weight	5.9 kg
Overall dimensions (H x W)	2200x1100 mm
Max. exposed area	0.14 m <sup>2</sup>
Material	aluminum
Rated wind velocity	55 m/s

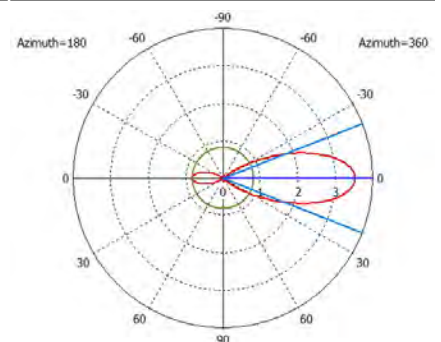
E-plane 1/4 λ dipole to mast spacing



E-plane 3/8 λ dipole to mast spacing



H-plane ( BD2-3G )





The LAMBDA BD2-6G - is a four folded dipole elements wide band VHF antenna for professional radio systems. All antenna parts are made of aluminum and covered with polymer powdered protecting coating. All components of dipole element are DC grounded for better lightning and antistatic protection.

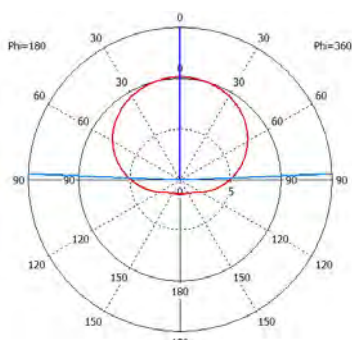
The supporting mast doesn't include into ordering package.



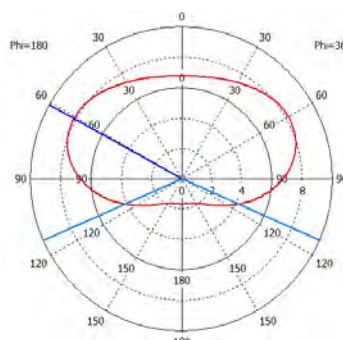
**SPECIFICATIONS**

ELECTRICAL	
Frequency Range	136–174 MHz
Band width	40 MHz
SWR	< 1.5
Gain, dBd (1/4 dipole to mast spacing)	6
Gain, dBd (3/8 dipole to mast spacing)	9
Max. Power	200 W
Impedance	50 Ω
Connector	N (female)
Vertical beamwidth (3/8 spacing)	19°
Lightning protection	DC-grounded
MECHANICAL	
Elements	4
Weight	11.5 kg
Overall dimensions (H x W)	4800x1100 mm
Max. exposed area	0,29 m <sup>2</sup>
Material	aluminum
Rated wind velocity	55 m/s

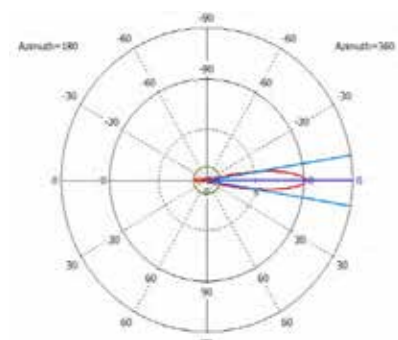
E-plane 1/4 λ dipole to mast spacing

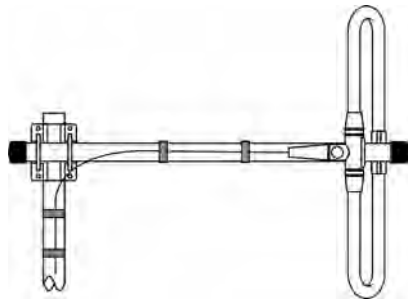


E-plane 3/8 λ dipole to mast spacing



H-plane BD2 - 6G





Single, 0 dBd folded dipole incorporating a balun optimized for wide bandwidth and accurate matching. The entire balun unit and feeder terminations are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections. The dipole have been constructed with high-quality aluminum to prevent corrosion. All metal parts are DC-grounded.

The antenna is supplied with clamp for mounting on 27-50 mm diameter mast tubes.



**SPECIFICATIONS**

**ELECTRICAL**

Frequency Range	300-350 MHz
Band width	30 MHz
SWR	< 1.5
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

**MECHANICAL**

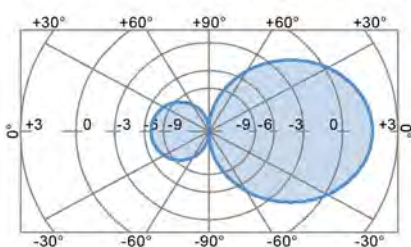
Weight	2.4 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S

**TYPE**

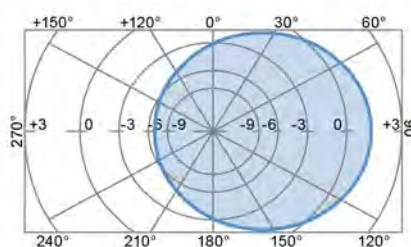
**FREQUENCY**

BD360-1G/L	300-330 MHz
BD360-1G/H	320-350 MHz

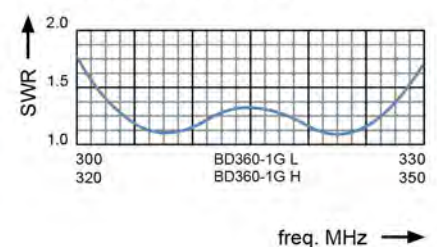
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





Single, 0 dBd folded dipole incorporating a balun optimized for wide bandwidth and accurate matching. The entire balun unit and feeder terminations are completely sealed in a polyethylene (PET) ensuring permanent waterproof connections. The dipole has been constructed with high-quality aluminum to prevent corrosion. All metal parts are DC-grounded.

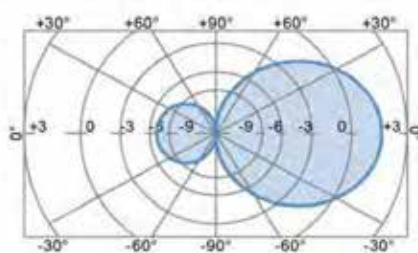
The antenna is supplied with clamp for mounting on 27-50 mm diameter mast tubes.



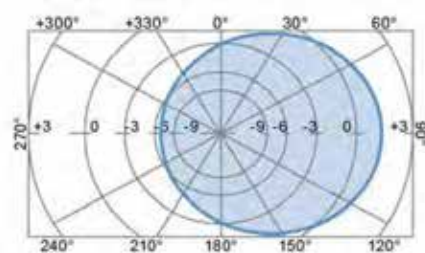
### SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Band width	70 MHz
SWR	< 1.5
Gain	0 dBd (2.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	1.6 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BD70-1G/l	380-450MHz
BD70-1G/h	445-512 MHz

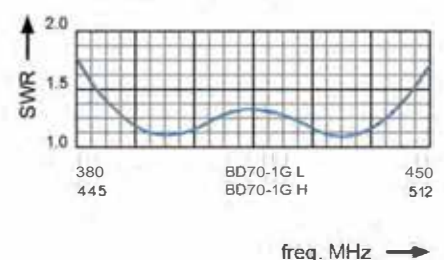
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





The BBD70-3G3G - is a two folded dipole elements wide band VHF antenna for professional radio systems. All antenna parts are made of aluminum and covered with polymer powdered protecting coating. All components of dipole element are DC grounded for better lightning and antistatic protection.

The supporting mast doesn't include into ordering package.



**SPECIFICATIONS**

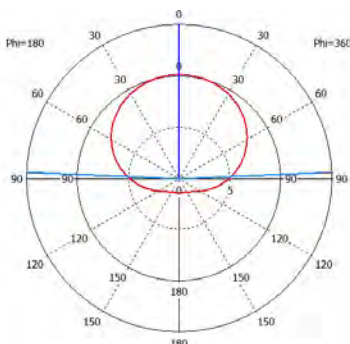
**ELECTRICAL**

Frequency Range	380-512 MHz
Band width	70 MHz
SWR	< 1.5
Gain, dBd (1/4 dipole to mast spacing)	3
Gain, dBd (3/8 dipole to mast spacing)	5.6
Max. Power	200 W
Impedance	50 Ω
Connector	N (female)
Vertical beamwidth (3/8 spacing)	37°
Lightning protection	DC-grounded

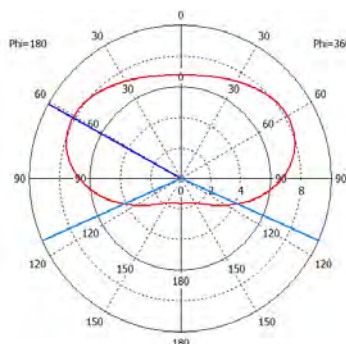
**MECHANICAL**

Elements	2
Weight	3.2 kg
Overall dimensions (H x W)	800x550 mm
Max. exposed area	0.14 m <sup>2</sup>
Material	aluminum
Rated wind velocity	55 ms

E-plane 1/4 λ dipole to mast spacing

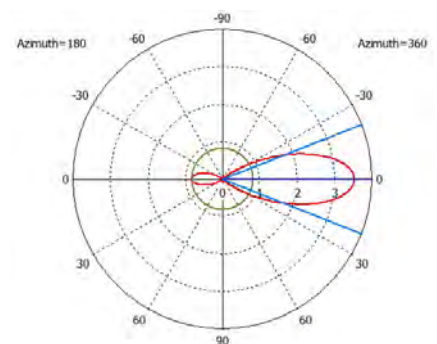


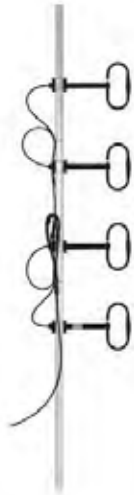
E-plane 3/8 λ dipole to mast spacing



H-plane

**BD70-3G**





The BD70-6G is a four folded dipole elements wide band UHF antenna for professional radio systems. All antenna parts are made of aluminum and covered with polymer powdered protecting coating. All components of dipole element are DC grounded for better lightning and antistatic protection.

The supporting mast doesn't include into ordering package.



**SPECIFICATIONS**

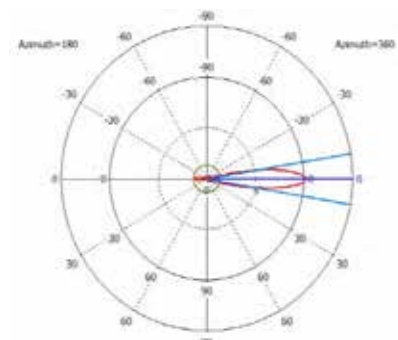
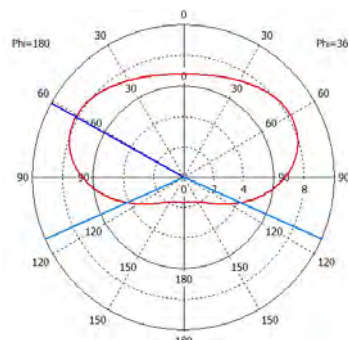
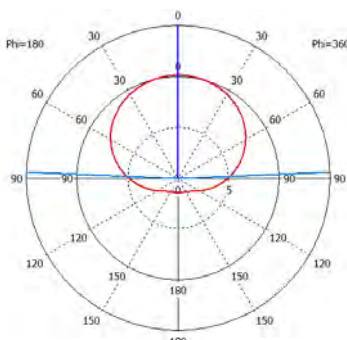
ELECTRICAL	
Frequency Range	380-512 MHz
Band width	70 MHz
SWR	< 1.5
Gain, dBd (1/4 dipole to mast spacing)	6
Gain, dBd (3/8 dipole to mast spacing)	9
Max. Power	200 W
Impedance	50 Ω
Connector	N (female)
Vertical beamwidth (3/8 spacing)	19°
Lightning protection	DC-grounded
MECHANICAL	
Elements	4
Weight	7.2 kg
Overall dimensions (H x W)	2200x550 mm
Max. exposed area	0,112 m <sup>2</sup>
Material	aluminum
Rated wind velocity	55 m/s

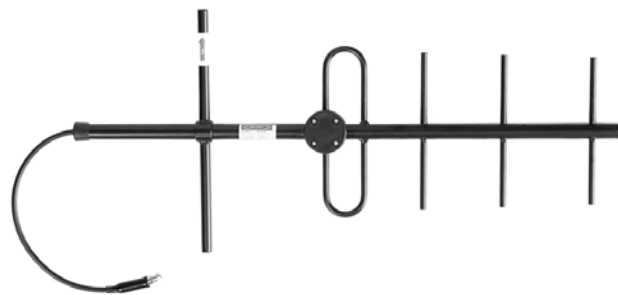
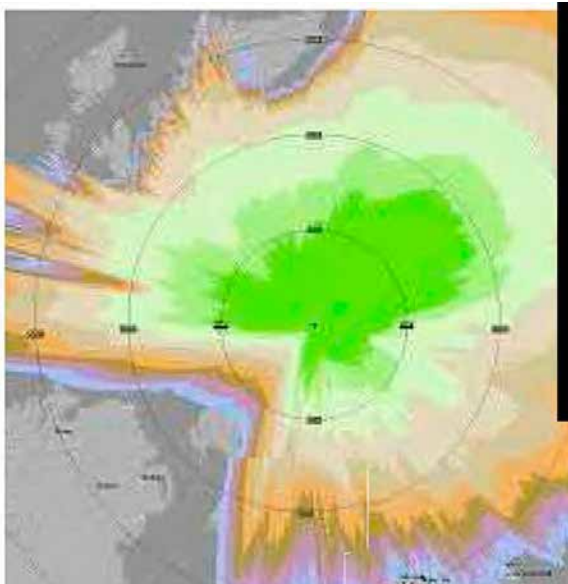
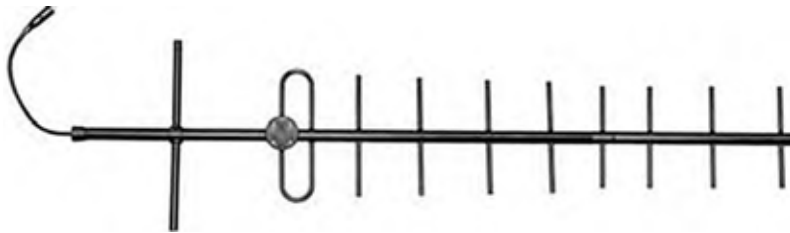
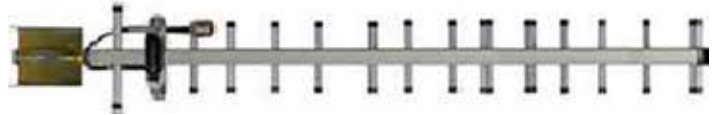
E-plane 1/4λ dipole to mast spacing

E-plane 3/8 λ dipole to mast spacing

H-plane

**BD70-6G**







This is a 2 element Yagi antenna with 3 dBd Gain. The entire balun unit and feeder cable inlet are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded.

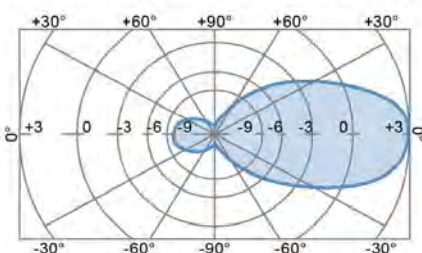
A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



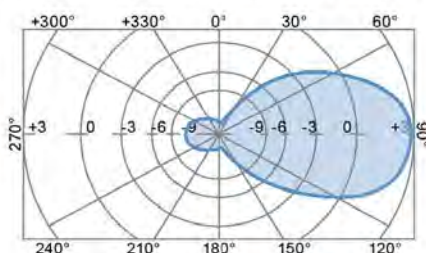
SPECIFICATIONS

ELECTRICAL	
Frequency Range	66-88 MHz
Band width	10 MHz
SWR	< 1.5
Gain	3 dBd (5.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	5 kg
Mounting	27 - 50 mm mast tube
Material	aluminium
Wind Load	55 M/S
TYPE	FREQUENCY
BY4-3G/l	66-76 MHz
BY4-3G/h	75-85 MHz

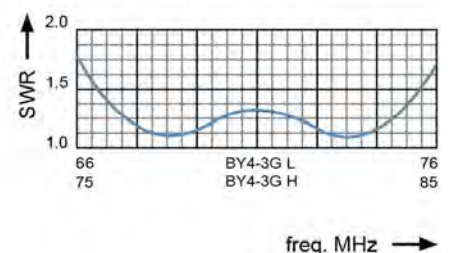
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE







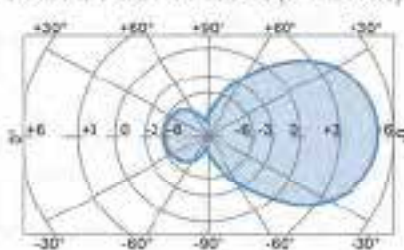
This is a 3 element Yagi antenna with 5 dBd Gain. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high quality aluminum alloys to prevent corrosion. All metal parts are DC-grounded. A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



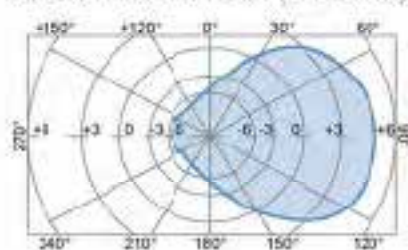
SPECIFICATIONS

ELECTRICAL	
Frequency Range	66-88 MHz
Band width	10 MHz
SWR	< 1.5
Gain	5 dBd (7.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	5.5 kg
Mounting	27 - 50 mm mast tube
Material	aluminium
Wind Load	55 M/S
TYPE	
FREQUENCY	
BY4-5G/l	66-76 MHz
BY4-5G/h	75-85 MHz

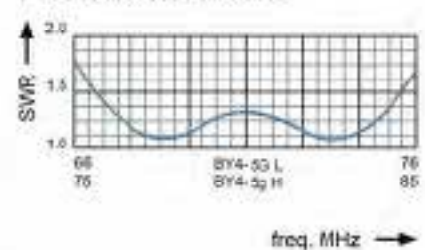
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





This is a 2 element Yagi antenna with 3 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit and feeder cable inlet are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded.

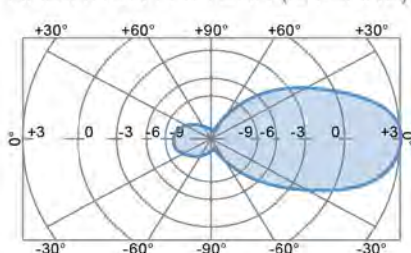
A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



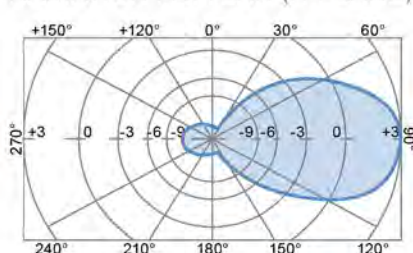
SPECIFICATIONS

ELECTRICAL	
Frequency Range	136-174 MHz
Band width	15 MHz
SWR	< 1.5
Gain	3 dBd (5.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	3.6 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BY2-3G/l	136-160 MHz
BY2-3G/h	158-174 MHz

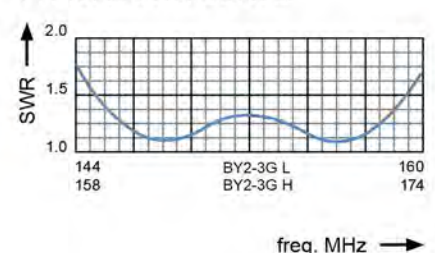
RADIATION PATTERN (E-PLANE)



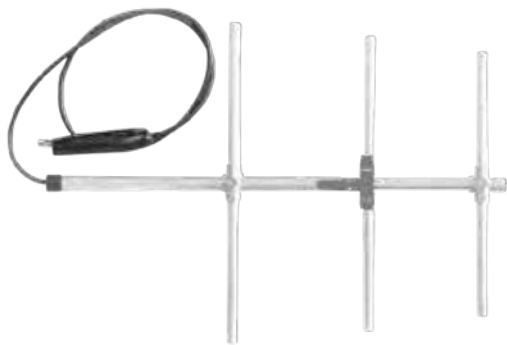
RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE



Three element Yagi Antenna for the 136-174 MHz Band with 6 dBd Gain



This is a 3 element Yagi antenna with 6 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit and feeder cable inlet are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded.

A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



SPECIFICATIONS

ELECTRICAL

Frequency Range	136-174 MHz
Band width	15 MHz
SWR	< 1.5
Gain	6 dBd (8.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

MECHANICAL

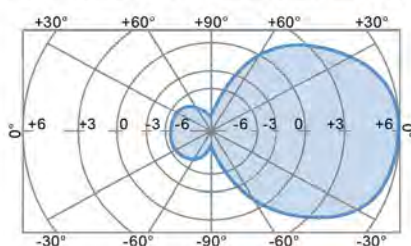
Weight	4.0 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S

TYPE

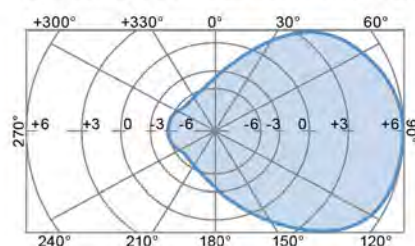
FREQUENCY

BY2-6G/l	144-160 MHz
BY2-6G/h	158-174 MHz

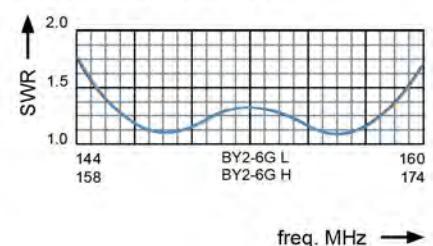
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE



Five element Yagi Antenna for the 136-174 MHz Band with 8 dBd Gain



This is a 5 element Yagi antenna with 8 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit and feeder cable inlet are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded.

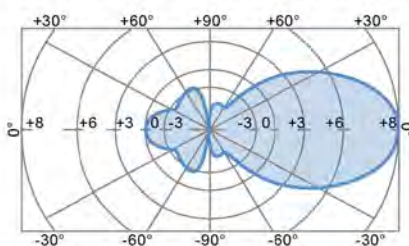
A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



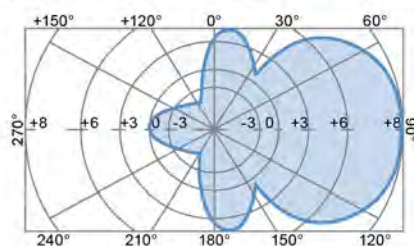
SPECIFICATIONS

ELECTRICAL	
Frequency Range	136-174 MHz
Band width	15 MHz
SWR	< 1.5
Gain	8 dBd (10.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	4.6 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BY2-8G/l	144-160 MHz
BY2-8G/h	158-174 MHz

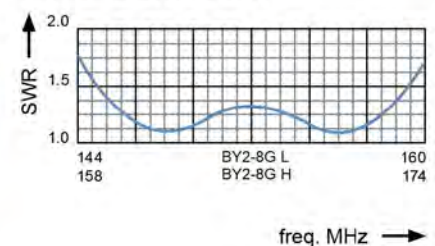
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





This is a 2 element Yagi antenna with 3 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit and feeder cable inlet are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded.

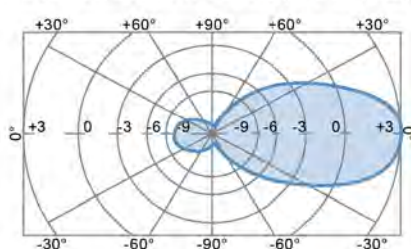
A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



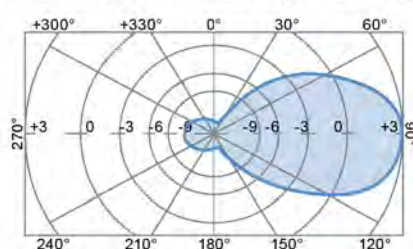
**SPECIFICATIONS**

ELECTRICAL	
Frequency Range	300-350 MHz
Band width	15 MHz
SWR	< 1.5
Gain	3 dBd (5.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	3.0 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BD360-3G/l	300-315 MHz
BD360-3G/ml	312-327 MHz
BD360-3Gmh	325-340 MHz
BD360-3G/h	337-350 MHz

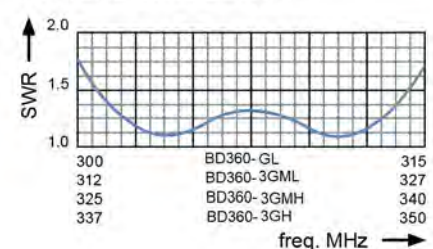
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





This is a 3 element Yagi antenna with 6 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit and feeder cable inlet are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded.

A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



SPECIFICATIONS

ELECTRICAL

Frequency Range	300-350 MHz
Band width	15 MHz
SWR	< 1.5
Gain	6 dBd (8.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

MECHANICAL

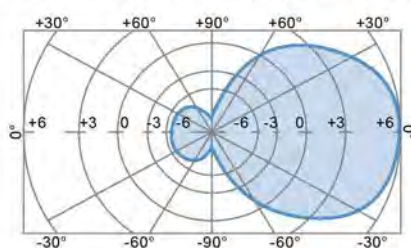
Weight	3.3 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S

TYPE

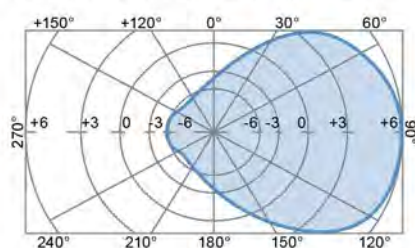
FREQUENCY

BY360-6G/l	300-315 MHz
BY360-6G/ml	312-327 MHz
BY360-6G/mh	325-340 MHz
BY360-6G/h	337-350 MHz

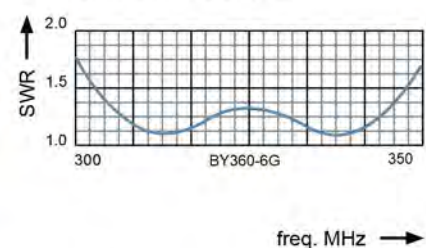
RADIATION PATTERN (E-PLANE)

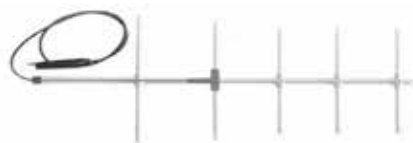


RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





This is a 5 element Yagi antenna with 8 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit and feeder cable inlet are completely sealed in a polyethylene (PET) moulding ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded.

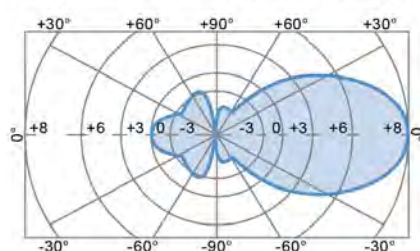
A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



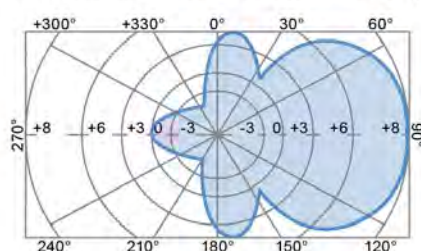
SPECIFICATIONS

ELECTRICAL	
Frequency Range	300-350 MHz
Band width	19 MHz
SWR	< 1.5
Gain	8 dBd (10.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	3.8 kg
Mounting	27 - 50 mm mast tube
Material	aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BY360-8G/l	300-319 MHz
BY360-8G/m	316-335 MHz
BY360-8G/h	331-350 MHz

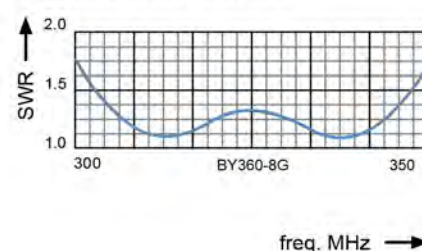
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE



Two element Yagi Antenna for the 380-512 MHz Band with 3 dBd Gain



This is a 2 element Yagi antenna with 3 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit is completely sealed in a polyamide (PA) screw cap ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality aluminum alloys to prevent corrosion. All metal parts are DC-grounded. A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



SPECIFICATIONS

ELECTRICAL

Frequency Range	380-512 MHz
Band width	40 MHz
SWR	< 1.5
Gain	3 dBd (5.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

MECHANICAL

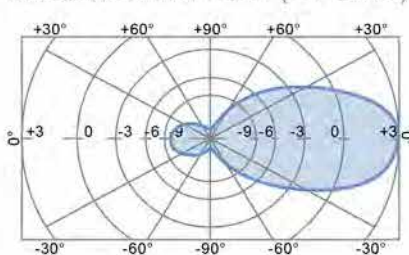
Weight	3.1 kg
Mounting	27 - 50 mm mast tube
Material	Epoxy-coated aluminum
Wind Load	55 M/S

TYPE

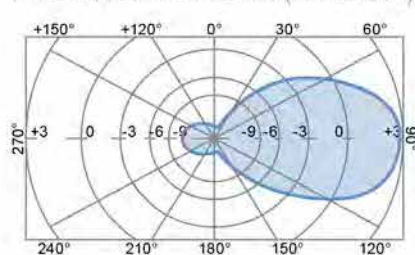
FREQUENCY

BY70-3G/l	380-420 MHz
BY70-3G/m	405-445 MHz
BY70-3G/h	450-512 MHz

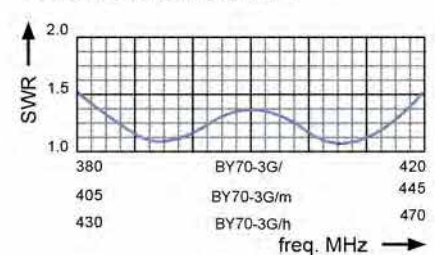
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)

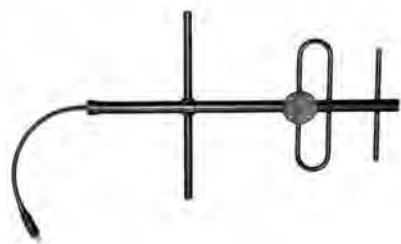


TYPICAL SWR CURVE





Three element Yagi Antenna for the 380-512 MHz Band with 5 dBd



This is a 3 element Yagi antenna with 5 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit is completely sealed in a polyamide (PA) screw cap ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded.

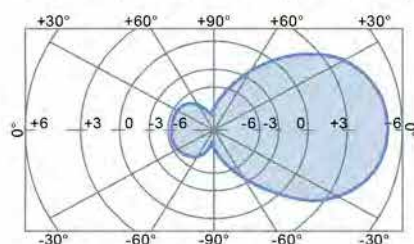
A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



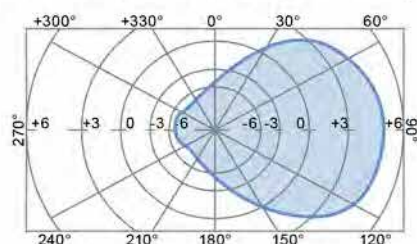
SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Band width	40 MHz
SWR	< 1.5
Gain	5 dBd (7.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	3.3 kg
Mounting	27 - 50 mm mast tube
Material	Epoxy-coated aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BY70-5G/l	380-420 MHz
BY70-5G/m	405-445 MHz
BY70-5G/h	450-512 MHz

RADIATION PATTERN (E-PLANE)

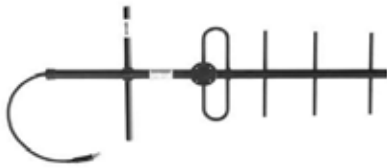


RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





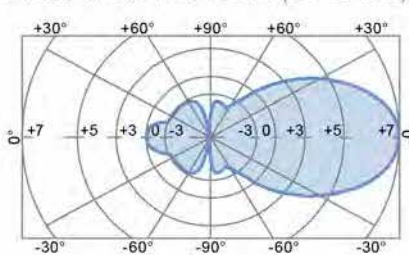
This is a 5 element Yagi antenna with 7 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit is completely sealed in a polyamide (PA) screw cap ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality aluminum alloys to prevent corrosion. All metal parts are DC-grounded. A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



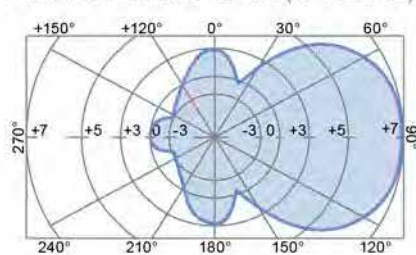
SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Band width	35 MHz
SWR	< 1.5
Gain	7 dBd (9.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	3.4 kg
Mounting	27 - 50 mm mast tube
Material	Epoxy-coated aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BY70-7G/l	380-415 MHz
BY70-7G/m	410-445 MHz
BY70-7G/h	450-512 MHz

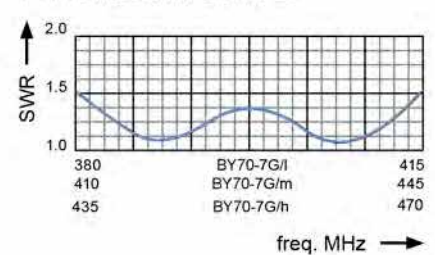
RADIATION PATTERN (E-PLANE)

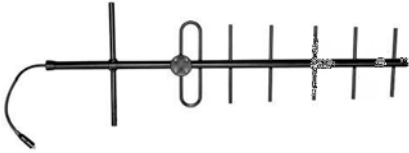


RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





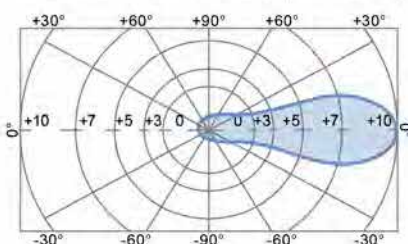
This is a 7 element Yagi antenna with 10 dBd Gain. This Yagi incorporates baluns optimized for wide bandwidth and accurate matching. The entire balun unit is completely sealed in a polyamide (PA) screw cap ensuring permanent waterproof connections. The antenna is terminated with N (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. All metal parts are DC-grounded. A mast clamp is provided for mounting on 27-50 mm diameter mast tube.



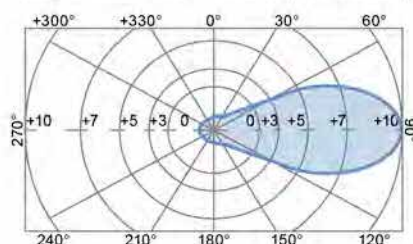
SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Band width	35 MHz
SWR	< 1.5
Gain	10 dBd (12.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)
MECHANICAL	
Weight	3.6 kg
Mounting	27 - 50 mm mast tube
Material	Epoxy-coated aluminum
Wind Load	55 M/S
TYPE	FREQUENCY
BY70-10G/l	380-415 MHz
BY70-10G/m	410-445 MHz
BY70-10G/h	445-512 MHz

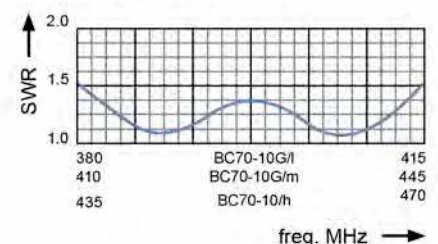
RADIATION PATTERN (E-PLANE)



RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





This is an 9 element Yagi antenna with 12 dBd Gain. The entire balun unit and feeder cable inlet are completely sealed in a polyvinyl chloride (PVC) screw cap ensuring permanent waterproof connections. The antenna is terminated with FME (female) connector. Radiating elements, supporting booms and adjoining metal castings are constructed in high-quality-aluminum alloys to prevent corrosion. A mast clamp is provided for mounting on 27-40 mm diameter mast tube.



SPECIFICATIONS

**ELECTRICAL**

Frequency Range	400-512 MHz
Band width	40 MHz
SWR	< 1.5
Gain	12 dBd (14.15 dBi)
Impedance	50 Ω
Max. Power	150 W
Polarization	Vertical; Horizontal
Antistatic protection	DC-grounded (Connector shows a DC-short)
Connector	N (female)

**MECHANICAL**

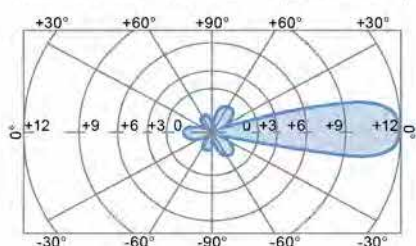
Weight	1.0 kg
Mounting	27 - 40 mm mast tube
Material	Aluminum
Wind Load	55 M/S

**TYPE**

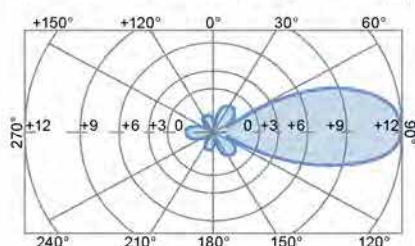
**FREQUENCY**

BY70-12G/l	400-440 MHz
BY70-12G/h	440-512 MHz

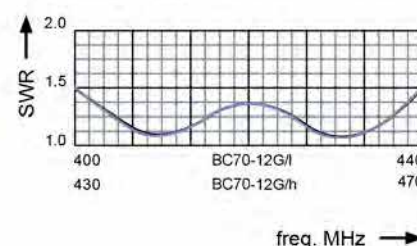
RADIATION PATTERN (E-PLANE)

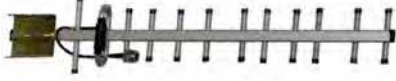


RADIATION PATTERN (H-PLANE)



TYPICAL SWR CURVE





TY3G12D - is a 12 elements directional antenna yagi with a folded dipole as driven element. It is used for the solutions of increasing the performance of modems and data terminals UMTS and CDMA-2000 standards. Antenna parts is made of galvanized aluminum. Plastic mounting elements is not used for this construction, to avoid UV and atmospheric factors influence.

The feeder connected through F type female connector or another type (special order needed). Ordering package includes mounting hardware – a U-bolt and special mounting bracket for rear mounting to the mast up to 40mm OD.



SPECIFICATIONS

ELECTRICAL	
Elements	12
Frequency Range	1900-2200 MHz
Band width	200 MHz
SWR	< 1.5
Gain	12 dBd
Impedance	50 Ω
Max. Power	50 W
Front to Back ratio	20 dB
Beamwidth (H-plane)	36°
Beamwidth (E-plane)	38°
MECHANICAL	
Weight	0.33 kg
Dimensions (H x W)	540 x 100 mm
Material	Galvanized aluminum

## IN WIRELESS YOU ALWAYS NEED ANTENNAS MULTI-BAND, BROADBAND & NARROWBAND

IoT (Internet of Things) is set to change our lives, both professionally and privately.

IIoT (Industrial Internet of Things) refers to interconnected sensors, instruments, and other devices networked together with computers' industrial applications, including, but not limited to, manufacturing and energy management.

Everything need to be connected to a solid network of base station antennas – you don't want the antenna to be the weakest link.

In battery driven applications it is of outmost importance, that your antenna is effective and transmit all energy and not just convert into heat.

- 5G/5GNR 700/800/900/1500/1800/2100/2600/3500 MHz
- 4G/LTE 700/800/1800/1900/2600 MHz
- 3G/UMTS 700/800/900/2100 MHz
- 2G/GSM 850/900/1800/1900 MHz
- WIFI/Wi-Fi 2.4 GHz/5.0 GHz



## CELLULAR, WIFI & IOT ANTENNAS

## 5G / 5G NR MULTIBAND ANTENNA



### 2-9 dBi UHF Omni-Directional

#### WAM5G (2G/3G/4G/5G)

Multiband antenna combining the cellular/mobile GSM(2G), UMTS(3G), LTE(4G), 5G(5G NR) and Wi-Fi frequencies e.g. for near cost vessels or land-based phone and Wi-Fi communication. Ideal for IOT and M2M applications.

Frequency	698 - 3800 MHz (GSM/UMTS/LTE/5G NR)
Power	40 Watt
Gain	0 - 7 dBd (2.15 - 9.15 dBi)
Mounting Type	pole or wall bracket (By N-connector)
Mounting Place	On Wall or Pole/Mast with external mounting bracket
Connector	N-female
Ingress protection	IP66
Length	457 mm
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



IoT

GSM

PCS

UMTS



#### Model

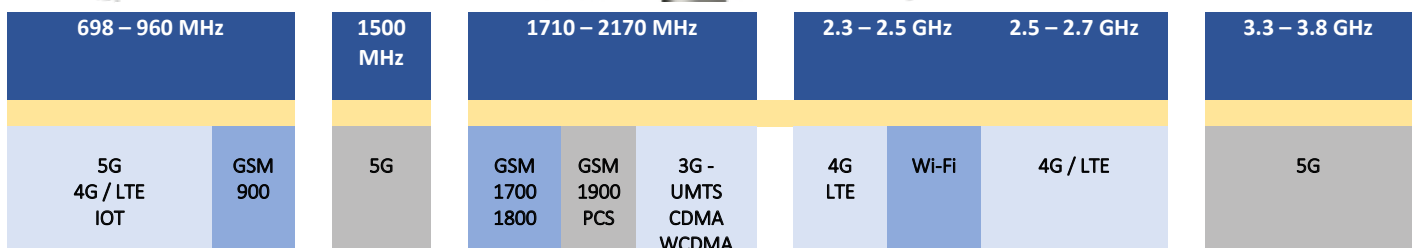
#### Item no.

WAM5G Antenna - Bulk	40102-000
WAM5G Antenna - Polybag	40102-001
WAM5G Antenna + wall bracket - Polybag	40102-011
WAM5G Antenna + pole bracket - Polybag	40102-021



40102-011 KIT

40102-021 KIT



## 5G / 5GNR MULTIBAND ANTENNA



### 2-9 dBi UHF Omni-Directional – (G1"-11 thread)

#### UHF5G (2G/3G/4G/5G)

Multiband antenna combining the cellular/mobile GSM(2G), UMTS(3G), LTE(4G), 5G(5GNR) and Wi-Fi frequencies e.g. for near cost vessels or land-based phone and Wi-Fi communication. Ideal for IOT and M2M applications.

Frequency	698 - 3800 MHz (GSM/UMTS/LTE/5GNR)
Power	40 Watt
Gain	0 - 7 dBd (2.15 - 9.15 dBi)
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Mounting Place	On mast
Connector	N-female
Ingress protection	IP66
Length	465 mm
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



IoT

GSM

PCS

UMTS



#### Model

#### Item no.

UHF5G Antenna - Bulk	14593-000
UHF5G Antenna - Polybag	14593-001
UHF5G Antenna - Carton tube	14593-002
UHF5G Antenna+ 1" Revolving Nut - Bulk	14593-430
UHF5G Antenna+ 1" Revolving Nut - Polybag	14593-431
UHF5G Antenna+ 1" Revolving Nut - Carton tube	14593-432



1" Revolving nut



Mast/Rail Mount HD  
G1"-11



Mast / Rail Mount  
G1"-11

698 – 960 MHz		1500 MHz	1710 – 2170 MHz			2.3 – 2.5 GHz	2.5 – 2.7 GHz	3.3 – 3.8 GHz
5G	GSM 900	5G	GSM 1700	GSM 1900 PCS	3G - UMTS CDMA WCDMA	4G LTE	Wi-Fi	4G / LTE
4G / LTE	IOT							5G



## 4G / LTE MULTIBAND ANTENNA



### 2-9i dB LTE Omni-Directional

#### WAM4G (Wall-Antenna Multiband 2G/3G/4G)

Long range multiband antenna, ideal for IOT/M2M, cellular/mobile GSM(2G), UMTS(3G), LTE(4G) and WIFI low band communication.

High quality wall mounted antenna especially made for demanding IOT/M2M application

Frequency	790 - 2690 MHz (GSM/UMTS/LTE)
Power	40 Watt
Gain	0 - 7 dBd (2.15 - 9.15 dBi)
Mounting Place	On wall or pole
Connector	N-female
Ingress protection	IP66
Length	440 mm
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



IoT

GSM

PCS

UMTS



#### Model

#### Item no.

WAM4G Antenna only - Bulk	40101-000
WAM4G Antenna only - Polybag	40101-001
WAM4G Antenna + Bracket - Polybag	40101-011
Wall Bracket - Polybag	10103-011
Mounting kit small (nut + washer) - Polybag	10000-501B



10103-011 Wall-bracket



10000-141 Pole mount

790 - 960 MHz		1710 - 2170 MHz			2.4 - 2.5 GHz	2.5 - 2.7 GHz
4G / LTE IOT	GSM 900	GSM 1700 1800	GSM 1900 PCS	3G - UMTS CDMA WCDMA	Wi-Fi	4G / LTE

## 4G / LTE MULTIBAND ANTENNA



### 2-9 dBi LTE Omni-Directional – (G1"-11 thread)

#### UHF4G (2G/3G/4G)

Multiband antenna combining the cellular/mobile GSM(2G), UMTS(3G), LTE(4G) and WIFI frequencies e.g. for near cost vessels or land-based phone and WIFI communication. Ideal for IOT and M2M applications.

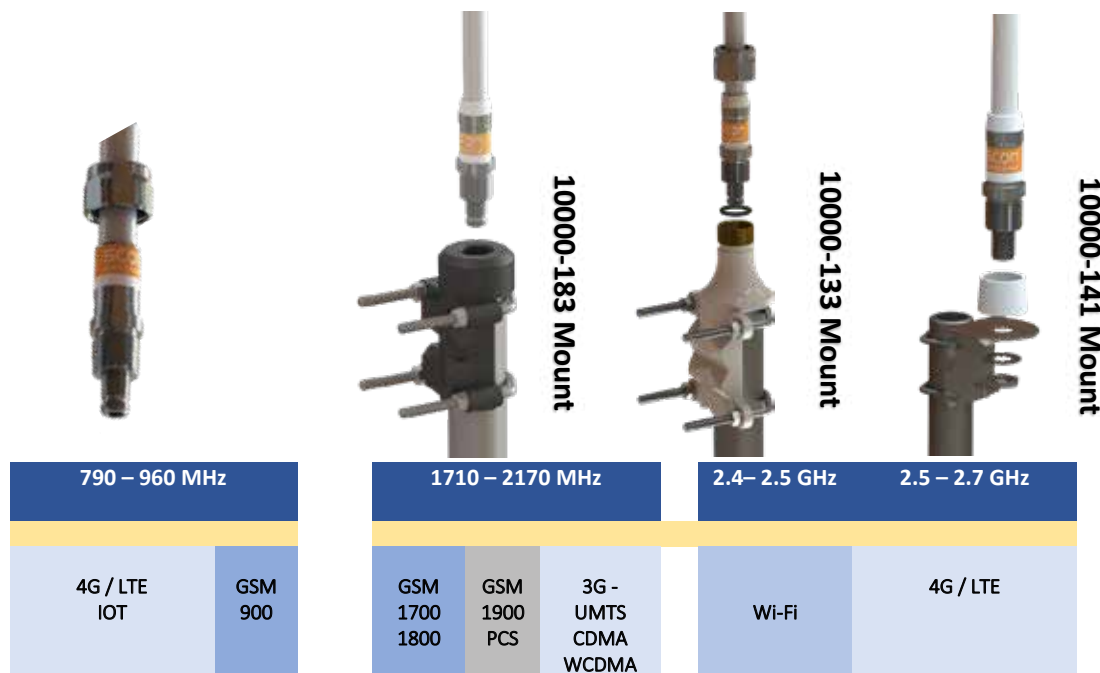
Frequency	790 - 2690 MHz (GSM/UMTS/LTE)
Power	40 Watt
Gain	0 - 7 dBd (2.15 - 9.15 dBi)
Mounting Place	On mast or deck
Mounting	On 1" threaded pole (G1"-11 thread) with Revolving Nut Kit or on optionally brackets
Connector	N-female
Ingress protection	IP66
Length	440 mm
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



IoT



Model	Item no.
UHF4G Antenna - Bulk	14493-000
UHF4G Antenna - Polybag	14493-001
UHF4G Antenna - Carton tube	14493-002
UHF4G Antenna+ 1" Revolving Nut - Polybag	14493-431
UHF4G Antenna+ 1" Revolving Nut - Carton tube	14493-433



## WIFI – DUALBAND ANTENNA



### WIFI Omni-Directional – (G1"-11 thread)

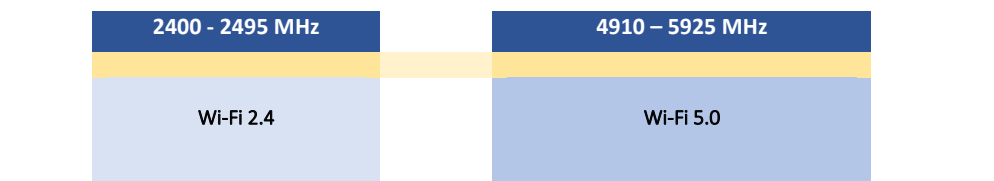
#### WIFI2B9 (2.4/5.0 GHz)

Long range high gain dual band WIFI antenna designed for professional maritime use. Longer range and better signal quality. Covers all WIFI bands (2.4 GHz and 5 GHz).

Frequency	2400 - 2495 MHz, 4910 - 5925 MHz (IEEE 802.11 (WLAN) a/b/g/h/j/n/p/ac)
Power	10 Watt
Gain	5 dBd (7.15 dBi)
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Connector	N-female
Ingress protection	IP66
Length	558 mm
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



Model	Item no.
WIFI29B Antenna – Bulk	18001-000
WIFI29B Antenna – Polybag	18001-001
WIFI29B Antenna – Carton tube	18001-002
WIFI29B Antenna + 1" Revolving Nut – Bulk	18001-431
WIFI29B Antenna + 1" Revolving Nut – Polybag	18001-432



LTE/IOT ANTENNA

IoT

LTE Omni-Directional – (G1"-11 thread)

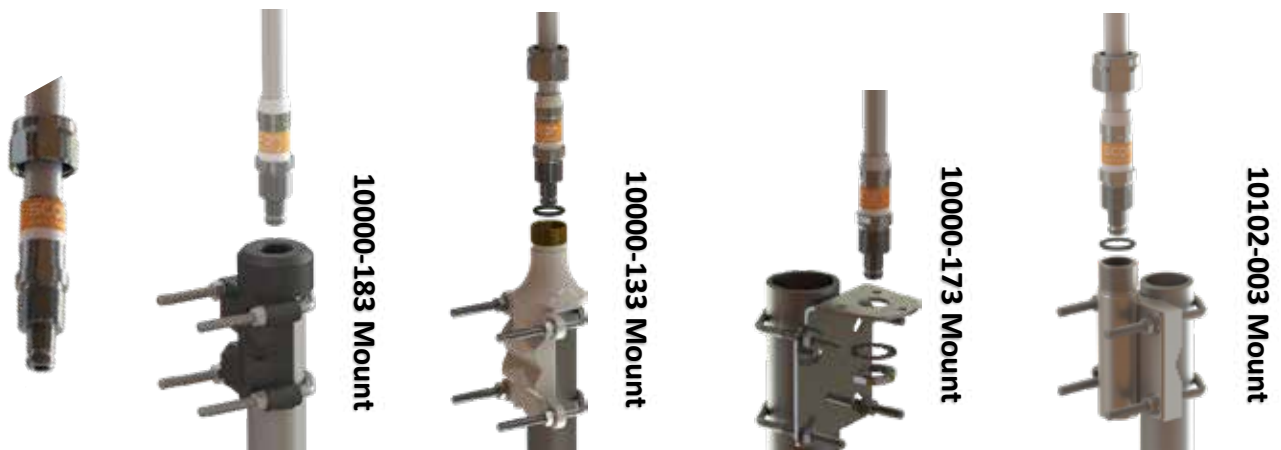
LTE700WB / LTE800WB

This wide-band high-gain antenna is developed for use in both maritime and land environments. The high gain design overcomes poor phone and data coverage in the mobile operator networks (LTE, UMTS & GSM), e.g. along cost lines and in rural areas.

Frequency	725 – 960 MHz
Power	200 Watt
Gain	3 dBd (5.15 dBi)
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
LTE700WB - Bulk	725-930	3 (5,15)	1540	14076-000
LTE700WB - in polybag	725-930	3 (5,15)	1540	14076-001
LTE700WB - in Carton tube	725-930	3 (5,15)	1540	14076-002
LTE700WB + 1" Revolving Nut - Polybag	725-930	3 (5,15)	1540	14076-431
LTE700WB + 1" Revolving Nut - Polybag	725-930	3 (5,15)	1540	14076-432
LTE800WB - Bulk	790-960	3 (5,15)	1440	14086-000
LTE800WB - in polybag	790-960	3 (5,15)	1440	14086-001
LTE800WB - in Carton tube	790-960	3 (5,15)	1440	14086-002
LTE800WB + 1" Revolving Nut - Polybag	790-960	3 (5,15)	1440	14086-431
LTE800WB + 1" Revolving Nut - Polybag	790-960	3 (5,15)	1440	14086-432



LORA / SIGFOX / LTE / IOT FIBERGLASS ANTENNA

IoT

LTE Omni-Directional – (G1"-11 thread)

LTE900NB / LTE903NB / LTE905NB

LTE900NB series are Omni-Directional Antennas for LPWAN with gains, 2 dBi, 5 dBi and 7 dBi. These antennas are optimal supporting ISM, LORA, IoT, M-BUS, Sigfox, etc. Supports **868 as well as 915 MHz** covering 860-930 MHz in same antenna.

Frequency	860 – 930 MHz
Power	200 Watt
Gain	0 / 3 / 5 dBd (2.15 / 5.15 / 7.15 dBi)
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)

Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
LTE900NB - in polybag	860-930	0 (2,15)	445	24009-001
LTE900NB - in Carton tube	860-930	0 (2,15)	445	24009-002
LTE903NB - in polybag	860-930	3 (5,15)	1135	24309-001
LTE903NB - in Carton tube	860-930	3 (5,15)	1135	24309-002
LTE905NB - in polybag	860-930	5 (7,15)	1345	24509-001
LTE905NB - in Carton tube	860-930	5 (7,15)	1345	24509-002



LoRa



IoT



10000-183 Mount



10000-133 Mount



10000-141 Mount

## 850 MHz OMNI-BASE ANTENNAS (2-7 dBi)

IoT

### LTE Omni-Directional – Integrated Fixed bracket

## BASE008/BASE308/BASE508

BASEx08 series antennas are Omni-Directional UHF 850 MHz base station antennas with integrated multipurpose mounting bracket comes with a generous bandwidth which reduces the need for multiple antennas both in stock and on installation sites.

Frequency	790 – 960 MHz
Power	100 – 200 Watt (depending on model)
Mounting Type	Fixed Tube Mounting Bracket. Stainless Steel Mounting Hardware included.
Mounting Place	On vertical or horizontal mast tube (Ø 30 – 60 mm)
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)

Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
BASE008-A	790-862	0 (2,15)	500	23008-004A
BASE008-B	872-960	0 (2,15)	500	23004-004B
BASE308-A	890-960	3 (5,15)	1190	23308-004A
BASE308-B	790-960	3 (5,15)	1500	23308-004B
BASE308-C	824-894	3 (5,15)	1190	23308-004C
BASE508-A	824-894	5 (7,15)	1500	23508-004A
BASE508-B	890-960	5 (7,15)	1500	23508-004B



LTE / IOT FIBERGLASS ANTENNA

IoT

**UHF9x series LTE Omni-Directional – (G1"-11 thread)**

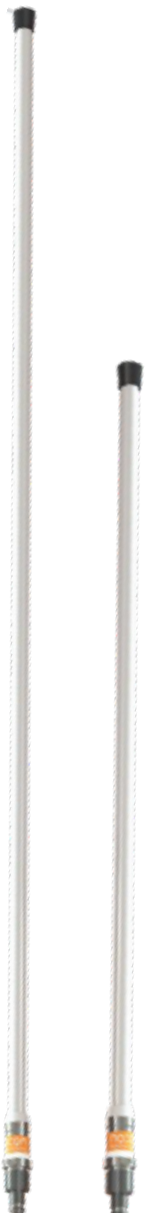
**UHF93 / UHF96 / UHF99**

UHF9x series are Omni-Directional UHF 850 MHz base station antennas with 2 dBi, 5 dBi and 7 dBi in 3 models. These antennas are optimal supporting ISM, GSM850, GSM900, etc.

Frequency	806 – 960 MHz
Power	200 Watt
Gain	0 / 3 / 5 dBd (2.15 / 5.15 / 7.15 dBi)
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)

Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
UHF93A - in polybag	806-866	0 (2,15)	445	14093-001A
UHF93B - in polybag	824-894	0 (2,15)	445	14093-001B
UHF93C - in polybag	872-960	0 (2,15)	445	14093-001C
UHF93A - in Carton tube	806-866	0 (2,15)	445	14093-002A
UHF93B - in Carton tube	872-960	0 (2,15)	445	14093-002B
UHF93C - in Carton tube	872-960	0 (2,15)	445	14093-002C
UHF96A - in polybag	806-866	3 (5,15)	1345	14096-001A
UHF96B - in polybag	824-894	3 (5,15)	1135	14096-001B
UHF96C - in polybag	890-960	3 (5,15)	1135	14096-001C
UHF96A - in Carton tube	806-866	3 (5,15)	1345	14096-002A
UHF96B - in Carton tube	872-960	3 (5,15)	1135	14096-002B
UHF96C - in Carton tube	890-960	3 (5,15)	1135	14096-002C
UHF99A - in polybag	824-894	5 (7,15)	1440	14099-001A
UHF99B - in polybag	890-960	5 (7,15)	1340	14099-001B
UHF99A - in Carton tube	824-894	5 (7,15)	1440	14099-002A
UHF99B - in Carton tube	890-960	5 (7,15)	1340	14099-002B

If 1" Revolving Nut Kit is needed with antenna: Change above listed P/N to xxxxx-**431** for kit in Polybag  
 If 1" Revolving Nut Kit is needed with antenna: Change above listed P/N to xxxxx-**432** for kit in Carton tube



10000-183 Mount



10000-133 Mount



10000-141 Mount

## SLIM LOW PROFILE IOT ANTENNAS

IoT

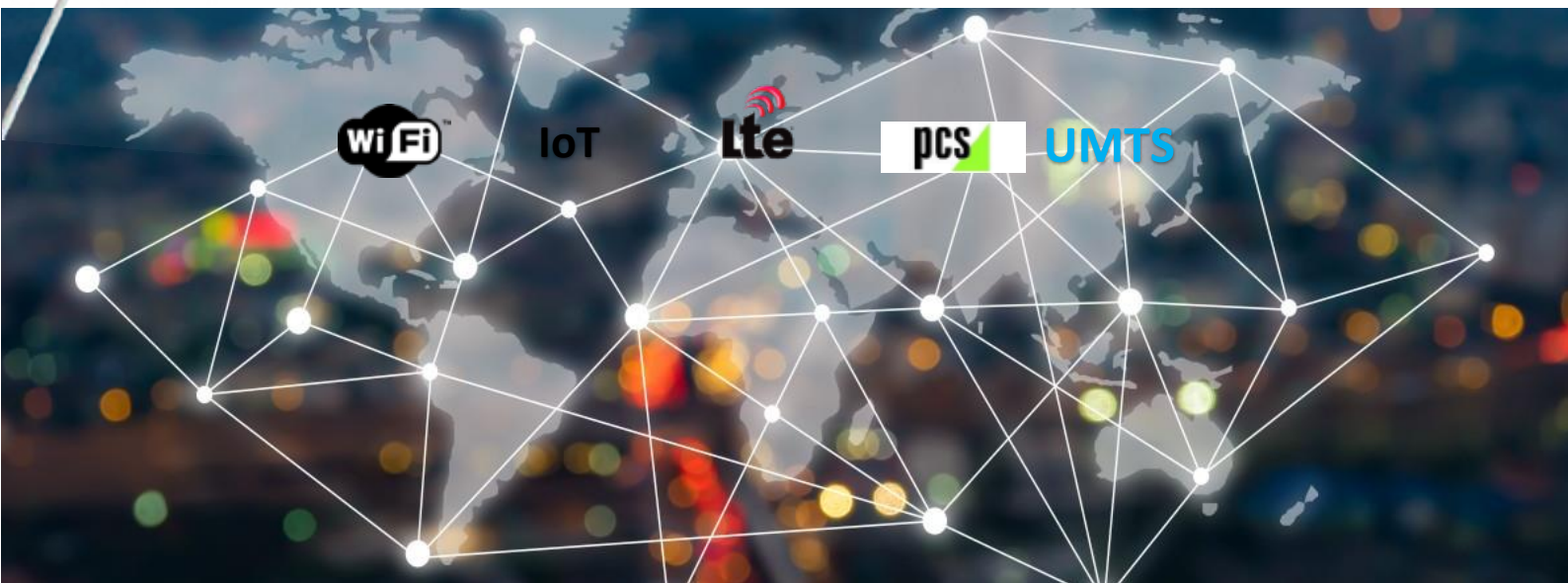
### Wall Mounted Low Profile Directional Antennas (Toblerone)

#### IOT434 / IOT868 / IOT245 / IOT826

Slim multiband or narrow-band antennas designed for the mobile IOT/M2M, GSM/UMTS/LTE or Wi-Fi systems

Mounting place  
Power  
Size  
Color

On wall  
5 watts  
122.5 x 35 x 42.5 mm (L x H x W)  
White



GSM

Lte

Model	Frequency	Gain	Pattern	Connection	Item no.
IOT434	432 - 436 MHz (ISM)	0 dBd	Directional	2.5m Cable + MCX-male	48005-011
IOT868	860 - 876 MHz (ISM)	0 dBd	Directional	1.5m Cable + SMA-male	48001-011
IOT245	2400-2495/4910-5925 MHz (WiFi)	0 dBd	Directional	2.5m Cable + SMA-male	48007-011
IOT826	790 - 2690 MHz (GSM/UMTS/LTE)	0 dBd	Directional	2.5m Cable + MCX-male	48006-011

Antennas can be ordered as bulk. If you put 4800x-010 instead of xxxxx-011



PUCK ANTENNA LTE - **Extendr®**

**GNSS**

**WiFi™**

**Lte**

**Extendr® 1 / Extendr® 2 / Extendr® 3**

Rugged tamper-proof multiband antenna combining all major cellular bands / GNSS or WiFi. The antenna is ideal for IoT and M2M applications providing a stable connection in critical areas. The Extendr® antenna family offers multiple mounting options and can also be offered with customer specified cables and connectors.

Frequency 1	790 – 2690 MHz (GSM/UMTS/LTE) <b>Extendr 1 / Extendr 2 / Extendr 3</b>
Frequency 2	1561.1 – 1605.4 MHz (GNSS) <b>Extendr 2 / Extendr 3</b>
Frequency 3	2400 – 2495 MHz / 4910 – 5925 MHz (WiFi) <b>Extendr 3</b>
Mounting	Through hole, Adhesive or Magnetic Mounting
Height above roof	46 mm
Diameter	111 mm
Connection 1 LTE	Fixed cable 1.5m SMA-male (RED) <b>Extendr 1 / Extendr 2 / Extendr 3</b>
Connection 2 GNSS	Fixed cable 1.5m SMA-male (BLUE) <b>Extendr 2 / Extendr 3</b>
Connection 3 Wi-Fi	Fixed cable 1.5m SMA-male (BLACK) <b>Extendr 3</b>
Ingress protection	IP67 (When mounted correctly)



Extendr 1 – LTE



Extendr 2 – LTE/GNSS



Extendr 3 – LTE/GNSS/WiFi



Magnetic



Adhesive



Through hole

Mounting	Extendr 1	Extendr 2	Extendr 3
Through hole	48011-001	48012-001	48013-001
Adhesive	48021-001	48022-001	48023-001
Magnetic	48031-001	48033-001	48033-001

Antennas are packed in bag but can be ordered as bulk. If you put xxxxx-**000** instead of xxxxx-001.

LOW PROFILE ANTENNA **TeleSat**

**GNSS**



**TeleSat-5 (2G/3G/4G)**

Heavy duty Omni-Directional 5-BAND antenna for through-hole roof mounting on trucks, trailers etc. Low profile design. IP67 Ingress protection

Frequency	790 – 2690 MHz (GSM/UMTS/LTE)
Mounting	Bolt-on with adhesive for effective sealing
Height above roof / Diameter	16 mm / Ø 92 mm
Connection	Fixed cable 0.15m SMA-female



**TeleSat-6 (2G/3G+GNSS)**

Heavy duty Omni-Directional 6-BAND antenna including built-in active GNSS antenna for tracking and navigation purpose. Through-hole roof mounting on trucks, trailers etc. Low profile design. IP67 Ingress protection

Frequency	824 – 2170 MHz (GSM/UMTS) / 1561.1 – 1605.4 MHz
Mounting	Bolt-on with adhesive for effective sealing
Height above roof / Diameter	16 mm / Ø 92 mm
Connection (GSM/UMTS) Red	Fixed cable 0.15m SMA-female
Connection2 (GNSS) Blue	Fixed cable 0.20m FME-female



**TeleSat-7 (2G/3G+WLAN+GNSS)**

Heavy duty Omni-Directional 7-BAND antenna including active GNSS antenna for through-hole roof mounting on trucks, trailers etc. including full 1/4 external WLAN whip antenna for optimum radiation performance. Low profile design. IP67 Ingress protection

Frequency	824 – 2170 MHz (GSM/UMTS) / 2310 – 2485 MHz (WLAN) 1561.1 – 1605.4 MHz (GNSS)
Mounting	Bolt-on with adhesive for effective sealing
Height above roof / Diameter	16 mm / Ø 92 mm
Connection1 (GSM/UMTS) Red	Fixed cable 0.15m SMA-female
Connection2 (WLAN) Black	Fixed cable 0.17m SMA-female
Connection3(GNNS) blue	Fixed cable 0.20m FME-female



**TeleSat-8 (2G/3G+WiFi+GNSS)**

Heavy duty Omni-Directional 8-BAND antenna with built-in active GNSS antenna for through-hole roof mounting on trucks, trailers etc. Low profile design. IP67 Ingress protection

Frequency	824 – 2170 MHz (GSM/UMTS) / 1561.1 – 1605.4 MHz 2400 – 2485 MHz/4915 – 5825 MHz (WiFi)
Mounting	Bolt-on with adhesive for effective sealing
Height above roof / Diameter	16 mm / Ø 92 mm
Connection1 (GSM/UMTS) Red	Fixed cable 0.15m SMA-female
Connection2 (WLAN) Black	Fixed cable 0.17m SMA-female
Connection3(GNNS) blue	Fixed cable 0.20m FME-female

Model	Item no.
TeleSat-5	45 500
TeleSat-6	45 600
TeleSat-7	45 700
TeleSat-8	45 800

Antennas comes in bag but can be ordered as bulk.  
If you put IP behind item no (example 45 xxx **IP**).

## LOW PROFILE TAMPER-PROOF ANTENNAS



Low profile mobile antennas for in-car, body mount, on-glass, through hole, etc.

### TeleSat-5S (2G/3G)

Heavy duty Omni-Directional 5-BAND antenna for roof mounting on trucks, trailers etc. Low profile design.

Frequency	824 – 2170 MHz (GSM/UMTS)
Mounting	Adhesive
Height above roof / Diameter	16 mm / Ø 92 mm
Connection	Fixed cable 2.5m FME-female (other types available)



### DOTCOM QUAD (2G/3G)

4-band self-adhesive linear patch antenna for in-car screen mounting. Low profile design.

Frequency	870-960 MHz / 1710 – 2170 MHz (GSM/UMTS)
Mounting	Adhesive pad
Diameter	Ø 54 mm
Connection	Fixed cable 3m FME-female (other types available)



### MINI-DOTCOM DUAL (2G)

Dual frequency self-adhesive linear patch antenna for in-car screen mounting. Low profile design.

Frequency	890-960 MHz / 1710 – 1880 MHz (GSM)
Mounting	Adhesive (on screen)
Diameter	Ø 33 mm
Connection	Fixed cable 2.5m FME-female (other types available)



Model	Item no.
TeleSat-5S	45 500S
DOTCOM QUAD	20 500
MINI-DOTCOM DUAL	20 700

Antennas comes in bag but can be ordered as bulk.  
If you put IP behind item no (example xx xxx **IP**).

DOME ANTENNA - Commutr®

GNSS

WiFi™

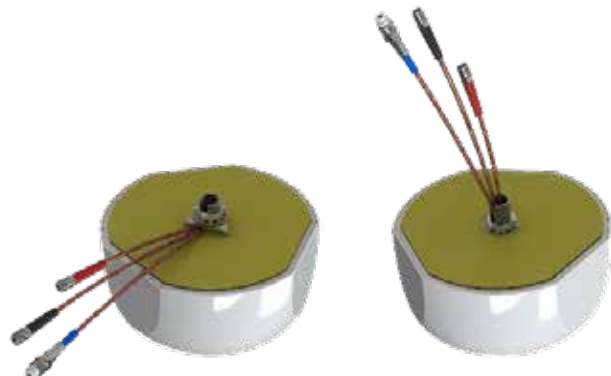
Lte

**Commutr® (2G/3G/4G+GNSS+WiFi)**

Full Omni-Directional multiband antenna for through-hole roof mounting. Especially made for demanding mobile communication applications on trucks and buses.

- 10 BANDS IN ONE INSTALLATION (LTE/GSM/UMTS/WLAN/GNSS)
- LOW PROFILE DESIGN
- ACTIVE GNSS ANTENNA
- WIDE RANGE OF EXTENSION CABLES AVAILABLE (NOT INCLUDED)

Frequency	790 – 2690 MHz (GSM/UMTS/LTE) 1561.1 – 1605.4 MHz (GNSS) 2412 – 2484 MHz / 4915 – 5825 MHz (WiFi)
Mounting	Bolt-on with adhesive tape for effective sealing
Height above roof	61.5 mm
Diameter	124 mm
Connection1 LTE	Fixed cable 0.20m SMA-female (RED)
Connection2 GNNS	Fixed cable 0.25m FME-female (BLUE)
Connection2 Wi-Fi	Fixed cable 0.30m SMA-female (BLACK)
Ingress protection	IP66



Model	Item no.	Kit
Commutr Antenna	48003-001	Antenna only
Commutr kit-06 (5m)	48003-011	Antenna + 3x extension 5m cables
Commutr kit-07 (3m)	48003-021	Antenna + 3x extension 3m cables



## GSM1800/GSM1900/LTE ANTENNAS

### Omni Directional – (G1"-11 thread)

## UHF186/189, UHF196/199 & UHF219

Antennas especially made for GSM1800, GSM1900, DECT, DCS, UMTS/3G & LTE

Frequency	1710 - 2170 MHz (covered by 3 models)
Power	100 Watt (40-watt UHF219)
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Mounting Place	On vertical or horizontal mast tube (depending on bracket)
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)

GSM

UMTS

Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
UHF186 – Bulk	1710-1880	3 (5,15)	640	14186-000
UHF186 – Polybag	1710-1880	3 (5,15)	640	14186-001
UHF186 – Carton tube	1710-1880	3 (5,15)	640	14186-002
UHF189 – Bulk	1710-1880	5 (7,15)	840	14189-000
UHF189 – Polybag	1710-1880	5 (7,15)	840	14189-001
UHF189 – Carton tube	1710-1880	5 (7,15)	840	14189-002
UHF196 – Bulk	1850-1990	3 (5,15)	640	14196-000
UHF196 – Polybag	1850-1990	3 (5,15)	640	14196-001
UHF196 – Carton tube	1850-1990	3 (5,15)	640	14196-002
UHF199 – Bulk	1850-1990	5 (7,15)	840	14199-000
UHF199 – Polybag	1850-1990	5 (7,15)	840	14199-001
UHF199 – Carton tube	1850-1990	5 (7,15)	840	14199-002
UHF219 – Bulk	1920-2170	5 (7,15)	640	14219-000
UHF219 – Polybag	1920-2170	5 (7,15)	640	14219-001
UHF219 – Carton tube	1920-2170	5 (7,15)	640	14219-002



10000-183 Mount



10000-141 Mount



10000-173 Mount



10102-003 Mount

## WLAN/ISM/UMTS ANTENNAS

### Omni Directional Light Antennas

## UHF243 & UHF263

Antenna especially made for WLAN, Wi-Fi 2.4, ISM and 4G/LTE

Frequency	2300 - 2690 MHz (covered by 2 models)
Power	40 Watt
Mounting Type	On 1" threaded pole or bracket (G1"-11 thread) with the supplied fixed Revolving Nut
Mounting Place	On vertical or horizontal mast tube (depending on bracket)
Connector	N-female
Ingress protection	IP66
Survival wind speed	55 m/s (200km/h)
Operating temperature	-55C to +70C (IEC 60068-2-1, IEC 60068-2-2)



Model	Frequency (MHz)	Gain dBd (dBi)	Length (mm)	Item no.
UHF243 – Bulk	2300-2500	0 (2,15)	210	14243-000
UHF243 – Polybag	2300-2500	0 (2,15)	210	14243-001
UHF243 – Carton tube	2300-2500	0 (2,15)	210	14243-002
UHF263 – Bulk	2500-2690	0 (2,15)	210	14263-000
UHF263 – Polybag	2500-2690	0 (2,15)	210	14263-001
UHF263 – Carton tube	2500-2690	0 (2,15)	210	14263-002



10000-183 Mount



10000-141 Mount



10000-173 Mount

## MOUNTING BRACKETS

Different types for different purposes



**MAST/RAIL MOUNT 1"-14NF**  
10000-183



**MAST/RAIL MOUNT 1"-14NF**  
10000-123



**MAST/RAIL MOUNT G1"-11**  
10102-003



**WALL/RAIL MOUNT (Ø 16.5 MM)**  
10000-141



**MAST/RAIL MOUNT (Ø 25 MM)**  
10000-173



**MAST MOUNT UNIVERSAL**  
10000-191



**DECK MOUNT 1"-14NF**  
10000-020



**CONNECTOR PROTECTION CAP**  
15 026



**1"REVOLVING NUT KIT G1"-11**  
10000-431



**1" ADAPTER TUBE HD (150 MM)**  
10000-420



**WALL BRACKET 87 (Ø11.8)**  
16200IP



**WALL BRACKET 87 (Ø11.8) WHITE**  
16210IP



**WALL BRACKET 87 (Ø13.5)**  
16220IP



**WALL BRACKET 169 (Ø17.5)**  
16180IP



**MAST/WALL MOUNT UNIVERSAL**  
10000-221

## FLEETMANAGEMENT AND RELIABLE COMMUNICATION

Antennas for the harsh environment met in professional vehicles, being trucks, busses, construction machinery or agricultural machinery.

Thanks to state-of-the-art antenna systems, you can always be in contact with both the vehicle and the staff operating the vehicle. You can determine the position, status and surroundings to initiate prompt reactions if required.

SCAN Antenna has a wide portfolio of antennas for VHF, UHF and GNSS. Including but not limited to 2G/3G/4G/5G and TETRA.



## MOBILE ANTENNAS



## SMALL SIZE 3-PORT DIPLEXER

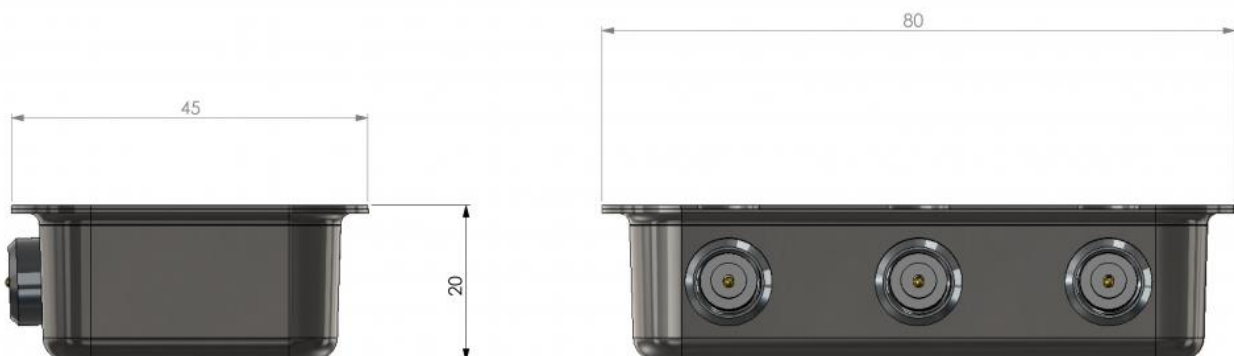
### Diplexer 108/136 - 225/380 - 500/800

Small size low loss 3 port diplexer with adhesive pad for easy installation.

Frequency	108/136 MHz, 225/380MHz or 500/800 MHz
Power	30 Watt
Mounting	Adhesive pad
Mounting Place	Inside
Connector	FME(M) or SMA(F)
Dimension	80 x 45 x 20 mm
Weight	Approx. 60-75g
Operating temperature	-40C to +70C



Model	Frequency (MHz)	Item no.
Diplexer 108/136 (FME)	L: 0-108 MHz / H: 136-1300 MHz	15 318 IP
Diplexer 225/380 (FME)	L: 0-225 MHz / H: 380-2170 MHz	15 500 IP
Diplexer 500/800 (FME)	L: 0-500 MHz / H: 800-2170 MHz	15 510 IP
Diplexer 108/136 (SMA)	L: 0-108 MHz / H: 136-1300 MHz	51081-000
Diplexer 225/380 (SMA)	L: 0-225 MHz / H: 380-2170 MHz	51082-000
Diplexer 500/800 (SMA)	L: 0-500 MHz / H: 800-2170 MHz	51083-000



## ROOF MOUNTS (M6)

### Mobile mounts for roof installations



#### SX-Mount

Strong and reliable universal mount for roof, trunk and wing mounting.

Tilt/rotate in all directions.

It accepts antenna whips with external M5 threaded stud or with internal M6 thread (by use of the supplied M5/M6 threaded adapter)

Frequency	0 – 1000 MHz
Mounting	Bolt-on (from inside or outside) Mounting from inside Ø13 mm Mounting from outside: Ø19mm
Height above roof	46 mm
Connector	Fixed cable – FME-male
Ingress protection	IP65 (when mounted)
Color	Black

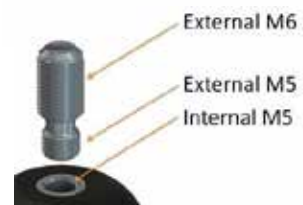
	SX-Mount 0.1m	SX-Mount 5m
<b>Item no.</b>	46 500	46 515

#### MultiMag-Mount

Very strong mobile magnet mount for roof mounting of all antenna whips supplied with either external M5 threaded stud (G-Mount types) or internal M6 thread (SX-Mount types).

Low profile design and very strong.

Frequency	0 – 1000 MHz
Mounting	Magnet
Height above roof	40 mm
Connection	Fixed cable 3.5m – FME-female
Ingress protection	IP65 (when mounted)
Dimensions	104 x 104 mm
Color	Black



	MultiMag-E (M5/M6)
<b>Item no.</b>	E16 045

## ROOF MOUNTS (M5)

### G-Mount

Mobile mount for roof mounting of antenna whips supplied with external M5 threaded stud.

It can be mounted from the inside or from the outside.

The antenna whip is tiltable 15° in all directions by bending the top section.



Frequency  
Mounting

0 – 2500 MHz  
Bolt-on (from inside or outside)  
Mounting from inside Ø13 mm  
Mounting from outside: Ø19mm

Height above roof  
Connection  
Ingress protection  
Color

30 mm  
Fixed cable  
IP65 (when mounted)  
Black

<b>Item no.</b>	G-Mount 0.15m + FME-male G16 060	G-Mount 0.15m + SMA-Female 46 062
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### CombiSat-Mount

Roof mounted universal antenna base with built-in active GNSS antenna. The base accepts mobile antenna whips with external M5 threaded stud. M5/M6-adapter for optionally mounting of antenna whips with internal M6 thread is supplied

Frequency  
Mounting  
Connector External  
Connector2 GNNS  
Ingress protection  
Color

0 – 2500 MHz (whip) / 1561.1-1605.4 MHz (GNSS)  
Bolt-on from inside / Mounting hole Ø18-22mm  
FME-male (black)  
FME-male (blue)  
IP65 (when mounted)  
Black



<b>Item no.</b>	CombiSat-Mount 0.15m G40 001	CombiSat-Mount xxx G40 xxx (others)
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### TetraSat-Mount

Roof mounted universal 4-band antenna base with tilt function and built-in active GNSS antenna and dual-band GSM/GPRS antenna. The base accepts mobile antenna whips (0-1000 MHz) with external M5 threaded stud or internal M6 thread (by use of the supplied M5/M6 threaded adapter)

Frequency

0 – 1000 MHz (whip) / 1561.1-1605.4 MHz (GNSS)  
870 - 960 MHz, 1710 - 1880 MHz (built in)

Mounting

Bolt-on from inside / Mounting hole Ø14-22mm

Connector GNSS

SMA-Female (blue)

Connector2 GSM

SMA-female (Red)

Connector3 External

FME-male (black)

Ingress protection

IP65 (when mounted)

Color

Black



<b>Item no.</b>	TetraSat 0.1 – 0.3m G40 630
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## ANTENNA WHIPS E-SERIES (M6)

Following antenna whip series E12 xxx (M6) can be used together with the SX-mount and MultiMag.

Model	Frequency	Gain dBd	Length (mm)	Item no.
E27DKF 0 dB	26.5 – 27.5 MHz (CB)	0	570	E12 062
ET27 5/8F 0 dB	26.5 – 27.5 MHz (CB)	0	570	E12 041
PTBL27 0 dB Flex	26.5 – 27.5 MHz (CB)	0	400	E12 160
E30DKF 0 dB	30 – 31 MHz	0	540	E12 258
E40DKF 0 dB	40 – 41 MHz	0	485	E12 246
PTBL40 0 dB Flex	40 – 41 MHz (HF)	0	375	E12 161
E65-75DKF 0 dB	65 – 75 MHz (4m)	0	540	E12 300
E66-88DKF 0 dB	66 – 88 MHz (4m)	0	560	E12 247
E68 0 dB Rigid	68 MHz (4m)	0	1110	E12 265
E60-300 0 dB Rigid	60 - 300 MHz (4m)	0	1240	E12 075
E135-185 0 dB Flex	135 – 185 MHz (2m)	0	500	E12 296
E135-300F 0 dB	135 – 300 MHz (2m)	0	570	E12 254
E135-300 0 dB Rigid	135 – 300 MHz (2m)	0	515	E12 044
E390 3 DB OC	380 – 400 MHz	3	680	E12 243
E420 3 dB OC	406 – 430 MHz	3	635	E12 170
E450 3DB OC	445 – 470 MHz	3	565	E12 067
E390-510 3DB	380 – 510 MHz (tunable)	3	675	E12 252

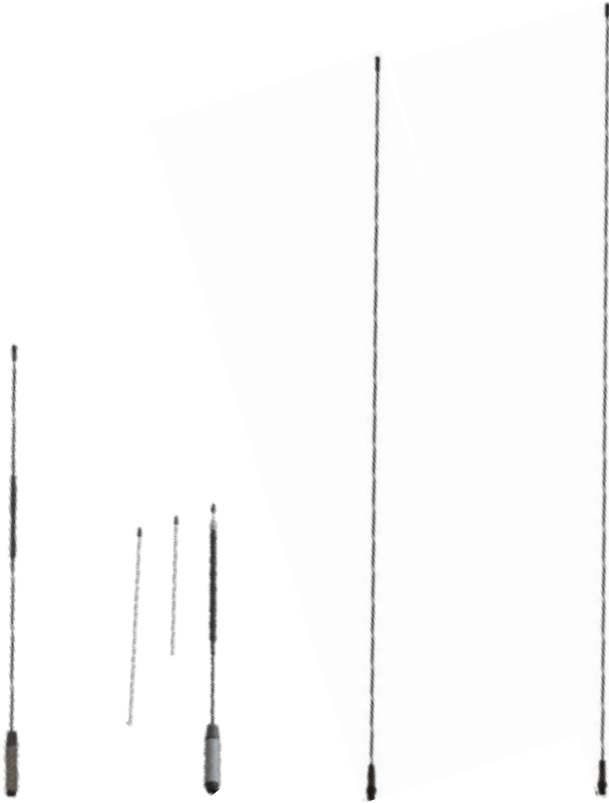
\*Antenna whips comes in bag but can be ordered as bulk. If you put IP behind item no (example E12 xxx **IP**).



E12 062 | E12 041 | E12 160 | E12 258 | E12 246 | E12 161

## ANTENNA WHIPS E-SERIES (M6)

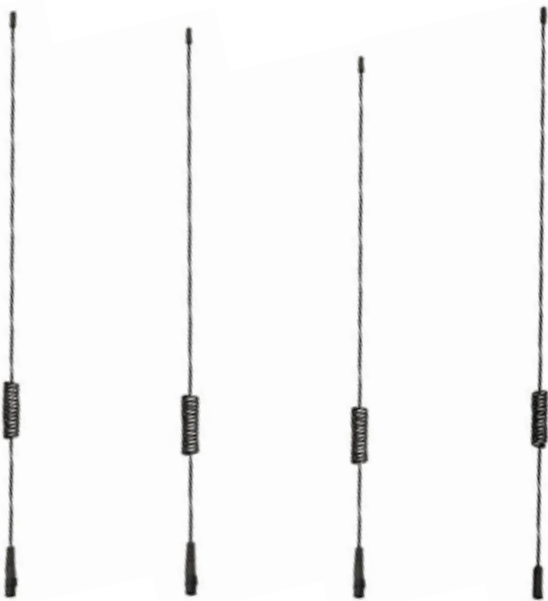
Following antenna whip series E12 xxx (M6) can be used together with the SX-mount and MultiMag.



E12 300 | E12 247 | E12 265 | E12 075



E12 296 | E12 254 | E12 044



E12 243 | E12 170 | E12 067 | E12 252



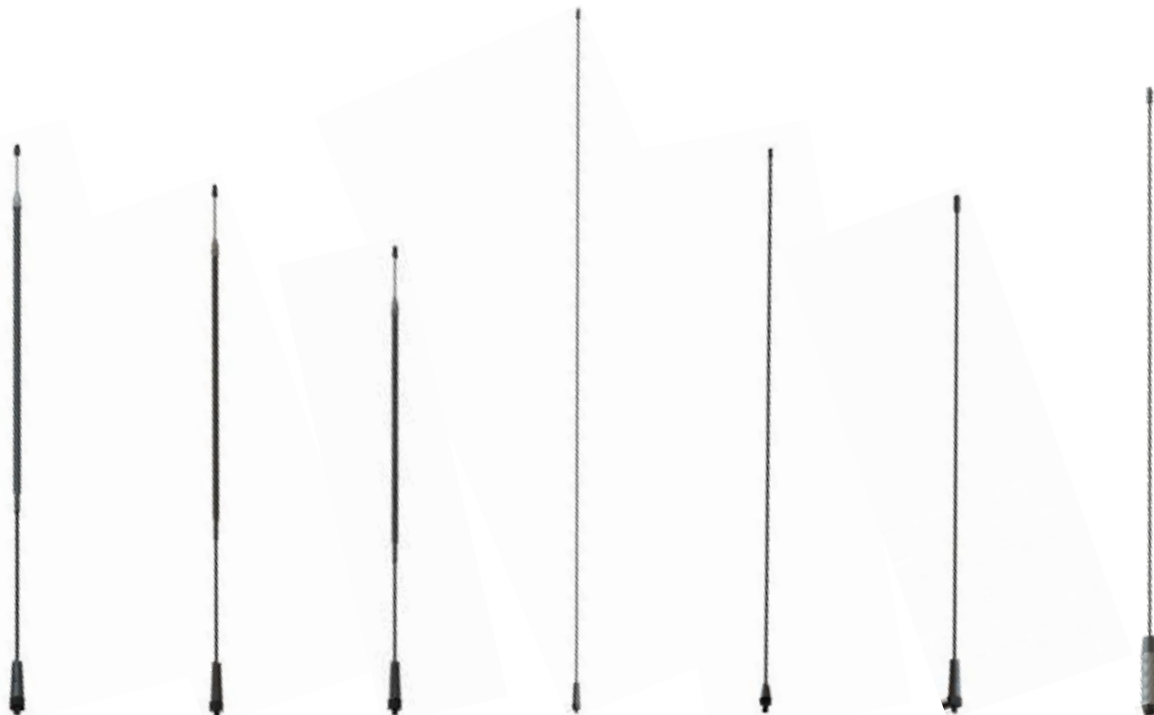
## ANTENNA WHIPS G-SERIES (M5)

Following antenna whip series G12 xxx (M5) can be used together with the G-mount & CombiSat, TetraSat and MultiMag (up to 1000 MHz antenna whips).

Model	Frequency	Gain	Height	Item no.
G27DKF 1/4	26.5 – 27.5 MHz (CB)	0 dBd	570 mm	G12 080
G30DKF 1/4	30 – 31 MHz	0 dBd	500 mm	G12 081
G40DKF 1/4	40 – 41 MHz	0 dBd	430 mm	G12 082
G30-300 0 dB	60 - 300 MHz (4m)	0 dBd	1235 mm*	G12 060
G135-195 0 dB	135 – 195 MHz (2m)	0 dBd	525 mm*	G12 052
G135-300 0 dB Rigid	135 – 300 MHz (2m)	0 dBd	510 mm*	G12 050
G135-300F 0 dB Rigid	135 – 300 MHz (2m)	0 dBd	700 mm*	G12 051
G400 0 dB M-FLEX	380 – 430 MHz (TETRA)	0 dBd	173 mm	G12 018
G414 0 dB M-FLEX	414 MHz (50 MHz bandwidth)	0 dBd	162 mm	G12 017
G419 0 dB M-FLEX	419 MHz (50 MHz bandwidth)	0 dBd	159 mm	G12 016
G450 0 dB M-FLEX	420 – 470 MHz (PMR)	0 dBd	155 mm	G12 019
G395 3 dB OC	380 – 410 MHz (TETRA)	3 dBd	665 mm	G12 021
G420 3 dB OC	410 – 435 MHz (TETRA)	3 dBd	630 mm	G12 032
G435 3 dB OC	435 – 455 MHz (PMR)	3 dBd	565 mm	G12 036
G450 3 dB OC	450 – 470 MHz (PMR)	3 dBd	550 mm	G12 042
G380-470 3 dB	380 – 470 MHz (tunable)	3 dBd	680 mm *	G12 039
G1800 3 dB FLEX	1710 – 1880 MHz	3 dBd	115 mm	G12 002
G1900 3 dB FLEX	1850 – 1990 MHz	3 dBd	115 mm	G12 005
G-UMTS 3 dB FLEX	1920 – 2170 MHz (UMTS)	3 dBd	90 mm	G12 151
G2400 0 dB FLEX	2400 – 2500 MHz (WLAN, ISM)	0 dBd	68 mm	G12 090
G900-1800 0 dB FLEX	890-960 / 1710-1880 MHz	0 dBd	68 mm	G12 070
G900-1800 0 dB POM	890-960 / 1710-1880 MHz	0 dBd	43 mm	G12 070POM

Antenna whips comes in bag but can be ordered as bulk. If you put IP behind item no (example G12 xxx **IP**).

\*Before cutting



G12 080 | G12 081 | G12 082 | G12 060 | G12 052 | G12 050 | G12 051

ANTENNA WHIPS G-SERIES (M5)



G12 018 | G12 017 | G12 016 | G12 019 | G12 021 | G12 032 | G12 036 | G12 042 | G12 039



G12 002 | G12 005 | G12 151 | G12 090 | G12 070 | G12 070 POM

## MOUNT FOR NON-CONDUCTIVE SURFACE MOUNTING



### NG-Mount

Mobile roof mount with integrated coaxial FME-male connector for non-conductive surface mounting of 1/2 λ portable antenna whips with FME-female connector

NOTE: Not suitable for 1/4 λ antenna whips unless sufficient ground plane is being provided!

Coaxial FME-male connection to antenna whip

Frequency	0 – 2500 MHz
Mounting	Bolt-on (from inside or outside)
Mounting place	On non-conductive vehicle roof etc.
Height above roof	30 mm
Connection	Fixed cable
Ingress protection	IP65 (when mounted)
Color	Black

	NG-Mount 1.5m + FME-female	NG-Mount 3m + FME-female	NG-Mount 4m + FME-female	NG-Mount 5m + FME-female
<b>Item no.</b>	16 137	16 090	16 104	16 136

Following 1/2 λ portable antennas with FME-female connector can be used on NG-Mount.

Model	Frequency	Gain	Height	Item no.
PT390 ½ (FME)	380 – 410 MHz	0 dBd	475 mm	14 140
PT420 ½ (FME)	400 – 430 MHz	0 dBd	430 mm	14 079
PT435 ½ (FME)	420 – 450 MHz	0 dBd	405 mm	14 070
PT450 ½ (FME)	440 – 470 MHz	0 dBd	390 mm	14 026
PT900 ½ (FME)	860 – 960 MHz	0 dBd	180 mm	14 017
PT920 ½ (FME)	880 - 960 / 1710 – 1880 / 1850 - 1990 / 1920 - 2170 MHz	0 dBd	170 mm	14 420
PT1900 ½ (FME)	1850 – 1990 MHz	0 dBd	110 mm	14 225
PT-UMTS ½ (FME)	1920 – 2170 MHz	0 dBd	110 mm	14 706
PT800/1900 ½ (FME)	824-894 / 1850-1990 MHz	0 dBd	170 mm	14 230

Antennas comes in bag but can be ordered as bulk. If you put IP behind item no (example 14 xxx **IP**).



14 140 | 14 079 | 14 070 | 14 026 | 14 017 | 14 420 | 14 225 | 14 706 | 14 230



PUCK ANTENNA LTE - **Extendr®**

**GNSS**

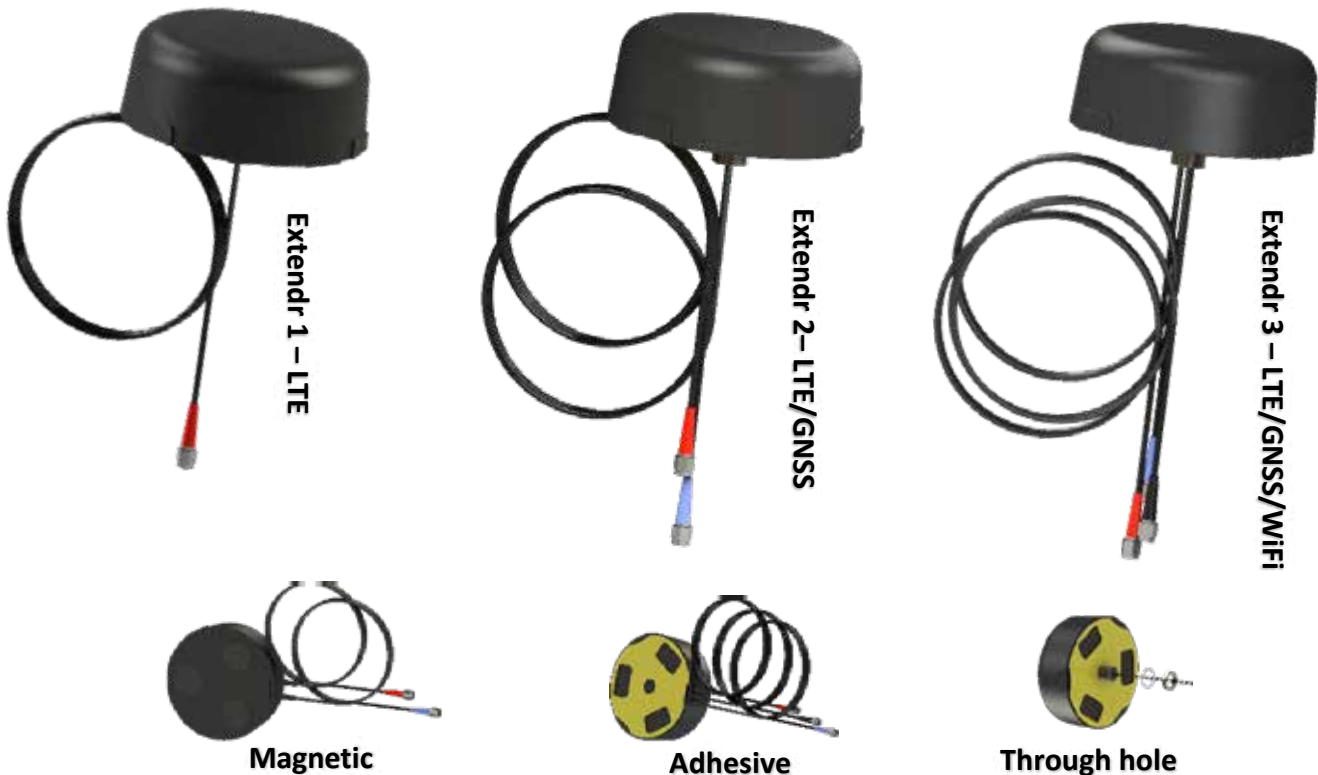
**WiFi™**

**Lte**

**Extendr® 1 / Extendr® 2 / Extendr® 3**

Rugged tamper-proof multiband antenna combining all major cellular bands / GNSS or WiFi. The antenna is ideal for IoT and M2M applications providing a stable connection in critical areas. The Extendr® antenna family offers multiple mounting options and can also be offered with customer specified cables and connectors.

Frequency 1	790 – 2690 MHz (GSM/UMTS/LTE) <b>Extendr 1 / Extendr 2 / Extendr 3</b>
Frequency 2	1561.1 – 1605.4 MHz (GNSS) <b>Extendr 2 / Extendr 3</b>
Frequency 3	2400 – 2495 MHz / 4910 – 5925 MHz (WiFi) <b>Extendr 3</b>
Mounting	Through hole, Adhesive or Magnetic Mounting
Height above roof	46 mm
Diameter	111 mm
Connection 1 LTE	Fixed cable 1.5m SMA-male (RED) <b>Extendr 1 / Extendr 2 / Extendr 3</b>
Connection 2 GNSS	Fixed cable 1.5m SMA-male (BLUE) <b>Extendr 2 / Extendr 3</b>
Connection 3 Wi-Fi	Fixed cable 1.5m SMA-male (BLACK) <b>Extendr 3</b>
Ingress protection	IP67 (When mounted correctly)



Mounting	Extendr 1	Extendr 2	Extendr 3
Through hole	48011-001	48012-001	48013-001
Adhesive	48021-001	48022-001	48023-001
Magnetic	48031-001	48033-001	48033-001

Antennas are packed in bag but can be ordered as bulk. If you put xxxxx-000 instead of xxxxx-001.

DOME ANTENNA - Commutr®

GNSS

WiFi™

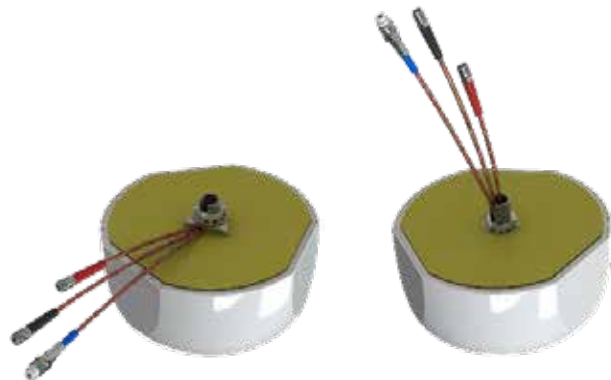
Lte

**Commutr® (2G73G/4G+GNSS+WiFi)**

Full Omni-Directional multiband antenna for through-hole roof mounting. Especially made for demanding mobile communication applications on trucks and buses.

- 10 BANDS IN ONE INSTALLATION (LTE/GSM/UMTS/WLAN/GNSS)
- LOW PROFILE DESIGN
- ACTIVE GNSS ANTENNA
- WIDE RANGE OF EXTENSION CABLES AVAILABLE (NOT INCLUDED)

Frequency	790 – 2690 MHz (GSM/UMTS/LTE) 1561.1 – 1605.4 MHz (GNSS) 2412 – 2484 MHz / 4915 – 5825 MHz (WiFi)
Mounting	Bolt-on with adhesive tape for effective sealing
Height above roof	61.5 mm
Diameter	124 mm
Connection1 LTE	Fixed cable 0.20m SMA-female (RED)
Connection2 GNSS	Fixed cable 0.25m FME-female (BLUE)
Connection3 Wi-Fi	Fixed cable 0.30m SMA-female (BLACK)
Ingress protection	IP66



Model	Item no.	Kit
Commutr Antenna	48003-001	Antenna
Commutr kit-06 (5m)	48003-011	Antenna + 3x extension 5m cables
Commutr kit-07 (3m)	48003-021	Antenna + 3x extension 3m cables



LOW PROFILE ANTENNA **TeleSat**

**GNSS**



### TeleSat-5 (2G/3G/4G)

Heavy duty Omni-Directional 5-BAND antenna for through-hole roof mounting on trucks, trailers etc. Low profile design. IP67 Ingress protection

Frequency	790 – 2690 MHz (GSM/UMTS/LTE)
Mounting	Bolt-on with adhesive for effective sealing
Height above roof / Diameter	16 mm / Ø 92 mm
Connection	Fixed cable 0.15m SMA-female



### TeleSat-6 (2G/3G+GNSS)

Heavy duty Omni-Directional 6-BAND antenna including built-in active GNSS antenna for tracking and navigation purpose. Through-hole roof mounting on trucks, trailers etc. Low profile design. IP67 Ingress protection

Frequency	824 – 2170 MHz (GSM/UMTS) / 1561.1 – 1605.4 MHz
Mounting	Bolt-on with adhesive for effective sealing
Height above roof / Diameter	16 mm / Ø 92 mm
Connection (GSM/UMTS) Red	Fixed cable 0.15m SMA-female
Connection2 (GNSS) Blue	Fixed cable 0.20m FME-female



### TeleSat-7 (2G/3G+WLAN+GNSS)

Heavy duty Omni-Directional 7-BAND antenna including active GNSS antenna for through-hole roof mounting on trucks, trailers etc. including full 1/4 external WLAN whip antenna for optimum radiation performance. Low profile design. IP67 Ingress protection

Frequency	824 – 2170 MHz (GSM/UMTS) / 2310 – 2485 MHz (WLAN) 1561.1 – 1605.4 MHz (GNSS)
Mounting	Bolt-on with adhesive for effective sealing
Height above roof / Diameter	16 mm / Ø 92 mm
Connection1 (GSM/UMTS) Red	Fixed cable 0.15m SMA-female
Connection2 (WLAN) Black	Fixed cable 0.17m SMA-female
Connection3(GNNS) blue	Fixed cable 0.20m FME-female



### TeleSat-8 (2G/3G+WiFi+GNSS)

Heavy duty Omni-Directional 8-BAND antenna with built-in active GNSS antenna for through-hole roof mounting on trucks, trailers etc. Low profile design. IP67 Ingress protection

Frequency	824 – 2170 MHz (GSM/UMTS) / 1561.1 – 1605.4 MHz 2400 – 2485 MHz/4915 – 5825 MHz (WiFi)
Mounting	Bolt-on with adhesive for effective sealing
Height above roof / Diameter	16 mm / Ø 92 mm
Connection1 (GSM/UMTS) Red	Fixed cable 0.15m SMA-female
Connection2 (WLAN) Black	Fixed cable 0.17m SMA-female
Connection3(GNNS) blue	Fixed cable 0.20m FME-female

Model	Item no.
TeleSat-5	45 500
TeleSat-6	45 600
TeleSat-7	45 700
TeleSat-8	45 800

Antennas comes in bag but can be ordered as bulk.  
If you put IP behind item no (example 45 xxx **IP**).

LOW PROFILE TAMPER-PROOF ANTENNAS



Low profile mobile antennas for in-car, body mount, on-glass, through hole, etc.

**TeleSat-5S (2G/3G)**

Heavy duty Omni-Directional 5-BAND antenna for roof mounting on trucks, trailers etc. Low profile design.

Frequency	824 – 2170 MHz (GSM/UMTS)
Mounting	Adhesive
Height above roof / Diameter	16 mm / Ø 92 mm
Connection	Fixed cable 2.5m FME-female (other types available)



**DOTCOM QUAD (2G/3G)**

4-band self-adhesive linear patch antenna for in-car screen mounting. Low profile design.

Frequency	870-960 MHz / 1710 – 2170 MHz (GSM/UMTS)
Mounting	Adhesive pad
Diameter	Ø 54 mm
Connection	Fixed cable 3m FME-female (other types available)



**MINI-DOTCOM DUAL (2G)**

Dual frequency self-adhesive linear patch antenna for in-car screen mounting. Low profile design.

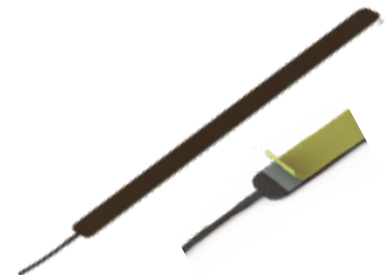
Frequency	890-960 MHz / 1710 – 1880 MHz (GSM)
Mounting	Adhesive (on screen)
Diameter	Ø 33 mm
Connection	Fixed cable 2.5m FME-female (other types available)



**On-Glass TETRA**

Mobile glass mounted 1/2 λ strip-line Tetra antenna. Mounted inside vehicles. Covert and tamper proof.

Frequency	380 – 430 MHz (TETRA)
Mounting	Adhesive (inside on screen)
Dimensions	290 x 21.5 x 1.5 mm
Connection (GSM/UMTS) Red	Fixed cable 3m SMA-male (other types available)



Model	Item no.
TeleSat-5S	45 500S
DOTCOM QUAD	20 500
MINI-DOTCOM DUAL	20 700
On-Glass TETRA	45101-001

Antennas comes in bag but can be ordered as bulk.  
If you put IP behind item no (example xx xxx **IP**).

LOW PROFILE GNSS-ANTENNAS

GNSS

**GNSS-ANTENNAS (SAT-NAVIGATION)**

Low-Profile GNSS-Antennas for satellite systems GLONASS, GPS, Galileo and BeiDou.  
For navigation and tracking purpose.

Frequency	1561.1 MHz, 1575.42 MHz, 1598.1 - 1605.4 MHz (GLONASS, GPS, Galileo & BeiDou)
Polarisation	RHC (Right hand Circular)
LNA Gain	26 dB (28 dB Low power versions)
Supply voltage	3-5.5V DC (low power versions 2-3V DC)
Current consumption	Approx. 20 mA (Low power version approx. 10 mA)



**SATFIX-1**  
14 140



**SATFIX-2**  
14 210



**SATFIX-1 (WHITE)**  
14 230 WIP



**SATFIX-1 (PASSIVE)**  
14 236



**SATFIX-1 (LOW POWER)**  
42 200



**UNISAT (LOW POWER)**  
40 923



**UNISAT**  
40 953



**UNISAT (VELCRO)**  
40 953V



**UNISAT (PASSIVE)**  
40 971



**SATMAG**  
40 983



**GNSS152-1**  
52 110



**GNSS01**  
16001-000

Model	Supply voltage	Mounting	Diameter	Item no.
SATFIX-1	3-5.5V DC	Bolt-on	Ø 48 mm	14 140
SATFIX-2	3-5.5V DC	Bolt-on	Ø 47 mm	14 201
SATFIX-1 (WHITE)	3-5.5V DC	Bolt-on	Ø 48 mm	14 230 WIP
SATFIX-1 (PASSIVE)		Bolt-on	Ø 48 mm	14 236
SATFIX-1 (LOW POWER)	2-3V DC	Bolt-on	Ø 48 mm	42 200
UNISAT (LOW POWER)	2-3V DC	Adhesive	Ø 38,5 mm	40 923
UNISAT	3-5.5V DC	Adhesive	Ø 38,5 mm	40 953
UNISAT (VELCRO)	3-5.5V DC	Velcro	Ø 38,5 mm	40 953V
UNISAT (PASSIVE)		Adhesive	Ø 38,5 mm	40 971
SATMAG	3-5.5V DC	Magnet	Ø 38,5 mm	40 983
GNSS152-1	3-5.5V DC	On-Glass	Ø 51 mm	52 110
GNSS01 (BLACK)	3-5.5V DC	Bolt-on	Ø 48 mm	16001-000

High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart.

The antenna has vertical polarization in 1/4 wave configuration. The antenna is supplied with 5.0 meter cable of the RG58/U type for RF and 5 meter RG 174 cable for GPS, which can terminate in any type of connector.



MOUNT MGS  
WITH SPRING S4



BLACK SPRING S4



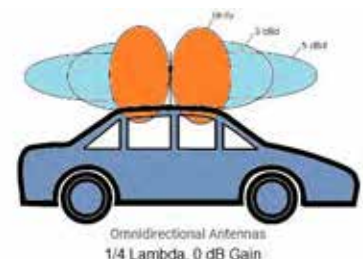
IN-4R



SPECIFICATIONS

ELECTRICAL	
Frequency Range	66-88 MHz , 1575 Mhz GPS
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB , 27 dB gain GPS
MECHANICAL	
Length	155 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Connector type ( BNC, PL,TNC,N,FME,SMA). Connector GPS ( SMA, FME,SMB....). With or W/O Spring (S4).



High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization in 1/4 wave configuration.

The antenna is supplied with 5.0 meter cable of the RG58/U type for RF and 5 meter RG 174 cable for GPS, which can terminate in any type of connector.



SPECIFICATIONS

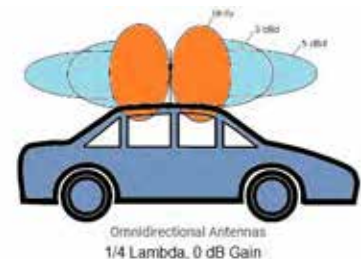
ELECTRICAL

Frequency Range	136-174MHz ,1575 Mhz GPS
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB , 27 dB GPS

MECHANICAL

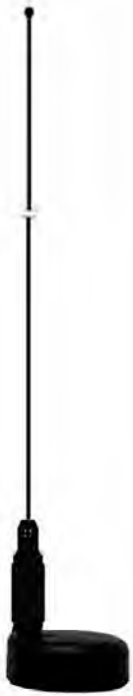
Length	70 cm max.
Weight	0.4 Kg

When ordering, please, specify : Exact Tx Rx frequencies. Connector type ( BNC, PL.TNC,N,FME,SMA). Connector GPS ( SMA, FME,SMB....). With or W/O Spring (S4).



Iode Mobile Antenna for the 136-174 MHz Band and GPS 1575 MHz with 3 dB gain

High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization in 5/8 wave configuration for longer range performance. The antenna is supplied with 5.0 meter cable of the RG58/U type for RF and 5 meter RG 174 cable for GPS, which can terminate in any type of connector.



SPECIFICATIONS

ELECTRICAL	
Frequency Range	136-174 MHz ,1575 Mhz GPS
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB , 27 dB GPS
MECHANICAL	
Length	55 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Connector type ( BNC, PL, TNC, N, FME, SMA). Connector GPS ( SMA, FME, SMB....). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization in 1/4 wave configuration.

The antenna is supplied with 5.0 meter cable of the RG58/U type for RF and 5 meter RG 174 cable for GPS, which can terminate in any type of connector.



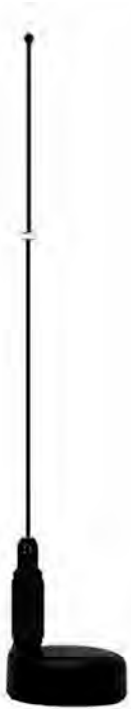
SPECIFICATIONS

ELECTRICAL	
Frequency Range	370-470 MHz ,1575 Mhz GPS
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB , 27 dB GPS
MECHANICAL	
Length	25 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Connector type ( BNC, PL, TNC,N,FME,SMA). Connector GPS ( SMA, FME,SMB....). With or W/O Spring (S4).

Mode Mobile Antenna for the 370-470 MHz Band and GPS 1575 MHz with 3 dB gain

High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization in 5/8 wave configuration for longer range performance. The antenna is supplied with 5.0 meter cable of the RG58/U type for RF and 5 meter RG 174 cable for GPS, which can terminate in any type of connector.



MOUNT MGS  
WITH SPRING S4



BLACK SPRING S4



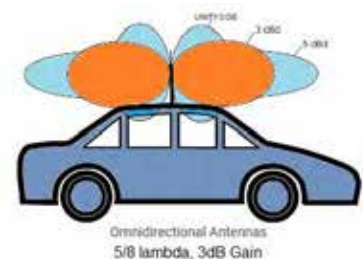
IN-70R



SPECIFICATIONS

ELECTRICAL	
Frequency Range	370 - 470 MHz ,1575 Mhz GPS
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB , 27 dB GPS
MECHANICAL	
Length	55 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Connector type ( BNC, PL, TNC, N, FME, SMA). Connector GPS ( SMA, FME, SMB....). With or W/O Spring (S4).



High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization in a 1/4 + 1/2 wave colinear configuration for longer range performance. The antenna is supplied with 5.0 meter cable of the RG58/U type for RF and 5 meter RG 174 cable for GPS, which can terminate in any type of connector.



MOUNT MGS  
WITH SPRING S4



BLACK SPRING S4



IN-70R



SPECIFICATIONS

ELECTRICAL	
Frequency Range	370-470 MHz ,1575 Mhz GPS
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	4.5 dB , 27 dB GPS
MECHANICAL	
Length	55 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Connector type ( BNC, PL.TNC,N,FME,SMA). Connector GPS ( SMA, FME,SMB....). With or W/O Spring (S4).



High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a 1/4 wave whip with TIN base. The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



MOUNT M3



MOUNT T2



SPRING S4



IN-4R



SPECIFICATIONS

ELECTRICAL	
Frequency Range	66-88 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB
MECHANICAL	
Length	155 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount TIN. Connector type ( BNC, PL, TNC, N, F-ME, SMA). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a 1/4 wave whip with TIN base. The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



IN 2 MAG



IN2 TRUNK



IN-2M



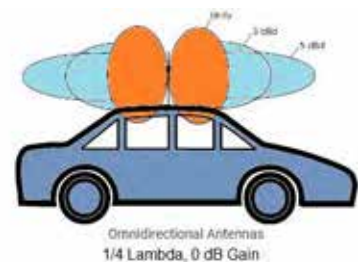
IN-4R

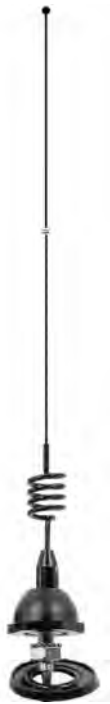


SPECIFICATIONS

ELECTRICAL	
Frequency Range	136 - 174 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω Vertical
Polarization	0 dB
Gain	
MECHANICAL	
Length	155 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount TIN. Connector type ( BNC, PL, TNC,N,F-ME,SMA). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil, spring or moulded, C2 with TIN base to obtain a 5/8 wave configuration, allowing the antenna to perform with 3 dB gain for long range operation.

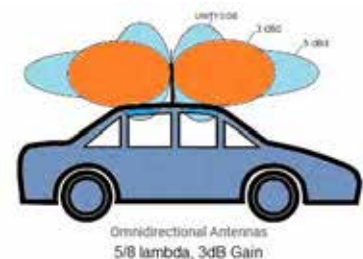
The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



SPECIFICATIONS

ELECTRICAL	
Frequency Range	136-174 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB
MECHANICAL	
Length	135 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount TIN. Connector type ( BNC, PL, TNC, N, F-ME, SMA). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a 1/4 wave whip with TIN base. The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



MOUNT M3



MOUNT T2



SPRING S4



IN70-R



SPECIFICATIONS

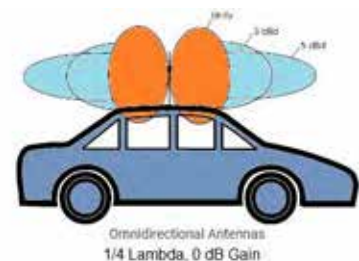
ELECTRICAL

Frequency Range	380-470 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB

MECHANICAL

Length	155 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount TIN. Connector type ( BNC, PL, TNC,N,F-ME,SMA). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil, spring or moulded, C2 with TIN base to obtain a 5/8 wave configuration, allowing the antenna to perform with 3 dB gain for long range operation.

The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



5/8 COIL



IN70-R



MOUNT M3



MOUNT T2



SPRING S4



SPECIFICATIONS

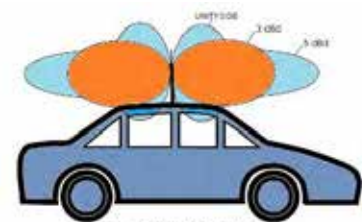
ELECTRICAL

Frequency Range	380-470 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB

MECHANICAL

Length	135 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount TIN. Connector type ( BNC, PL.TNC,N,F-ME,SMA). With or W/O Spring (S4).



Omnidirectional Antennas  
5/8 lambda, 3dB Gain



4.5 dB gain, collinear mobile antenna for the 370-512 MHz Band,



High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with TIN base to obtain a 1/4 - 1/2 wave configuration, allowing the antenna to perform with the longest possible range. The antenna is supplied with 5.0 meter-long cable of the RG58/U type and terminate in any type of connector.



MOUNT M3



MOUNT T2



SPRING S4



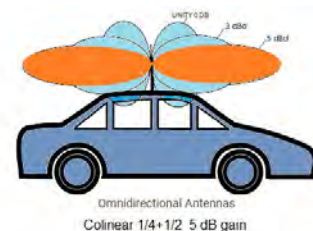
IN70-R



SPECIFICATIONS

ELECTRICAL	
Frequency Range	370-512 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	4.5 dB without ground plane
GPS Gain	27 dB active
MECHANICAL	
Length	45 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount TIN. Connector type ( BNC, PL, TNC, N, F- ME, SMA). With or W/O Spring (S4).



Dual mode GPS Mobile Antenna for the 370-512 MHz Band, 1575 Mhz in GPS



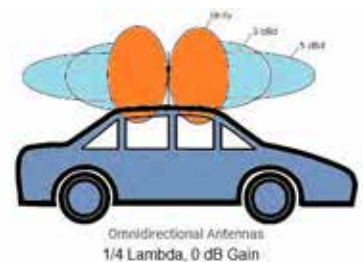
This antenna has been designed for use on radio networks with GPS control on the mobile units operating in the entire UHF band. Very robust and easy to install, it has become the favourite of most Tetra public operators in Europe.



SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-470 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active
Supply voltage GPS	From 2.7 to 5V dc
Noise Figure	1.7 to 2.1 dB
Cable RF	RG 58/U
Cable GPS	RG 174/U
MECHANICAL	
Length	20 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MDT. Connector type ( BNC, PL, TNC,N,F-ME,SMA). Connector GPS type ( SMA,FME, SMB...).





This antenna has been designed for use on radio networks with GPS control on the mobile units operating in the UHF band, GSM and UMTS frequencies. Very robust and easy to install, it has become the favourite of most Tetra public operators in Europe.

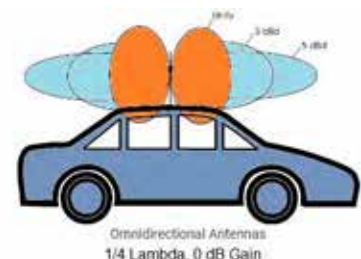
It combines one rf cable and 2 RG 174 for GPS and GSM/UMTS



SPECIFICATIONS

ELECTRICAL	
Frequency Range	370-512 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active
Supply voltage GPS	From 2.7 to 5V dc
Noise Figure	1.7 to 2.1 dB
Cable RF	RG 58/U
Cable GPS / UMTS	RG 174/U
MECHANICAL	
Length	20 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MDT. Connector type ( BNC, PL, TNC, N, F-ME, SMA). Connector GPS type ( SMA, FME, SMB...). Connector GSM/UMTS ( SMA, FME, SMB..).





This antenna has been designed for use on radio networks with GPS control on the mobile units operating in the UHF band, GSM and UMTS frequencies. Very robust and easy to install, it has become the favourite of most Tetra public operators in Europe.

It combines one rf cable and 2 rg 174 for GPS and GSM/UMTS



SPECIFICATIONS

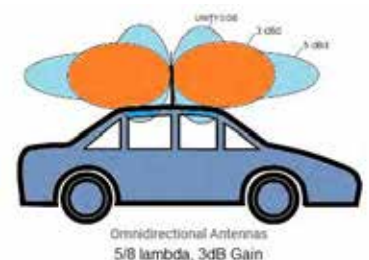
ELECTRICAL

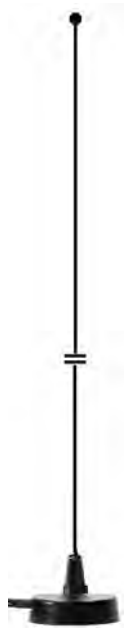
Frequency Range	370-512 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB in the UHF band
GPS Gain	27 dB active
Supply voltage GPS	From 2.7 to 5V dc
Noise Figure	1.7 to 2.1 dB
Cable RF	RG 58/U
Cable GPS	RG 174/U

MECHANICAL

Length	40 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MDT. Connector type ( BNC, PL, TNC, N, F, ME, SMA). Connector GPS type ( SMA, FME, SMB...). Connector for GSM/UMTS (SMA, FME, SMB..).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization with 1/4 wave configuration. The inbedded GPS antenna is active and offers 27 dB gain.

The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.



BLACK SPRING S4



IN4 -R



SPECIFICATIONS

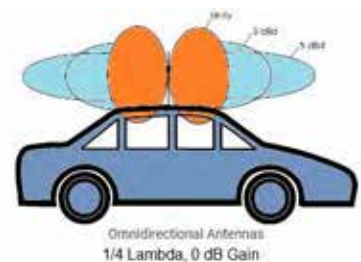
ELECTRICAL

Frequency Range	66-88 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active

MECHANICAL

Length	110 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MDT. Connector type ( BNC, PL, TNC, N, F- ME, SMA). Connector GPS type ( SMA, FME, SMB...). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization with 1/4 wave configuration. The inbedded GPS antenna is active and offers 27 dB gain.

The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and Rg 174 for GPS, both cables can terminate in any type of connector.



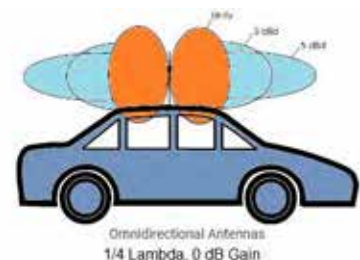
BLACK SPRING S4 IN2-R



SPECIFICATIONS

ELECTRICAL	
Frequency Range	146-174 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active
MECHANICAL	
Length	70 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MAG. Connector type ( BNC, PL.TNC,N,F-ME,SMA). Connector GPS type ( SMA,FME, SMB...). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization with 5/8 wave configuration for long range performance. The inbedded GPS antenna is active and offers 27 dB gain. The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.



BLACK SPRING S4



IN2-R



SPECIFICATIONS

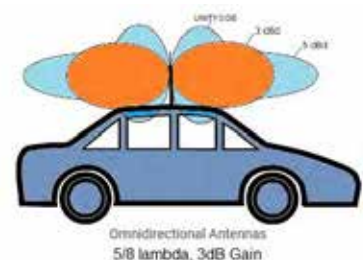
ELECTRICAL

Frequency Range	136-174 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB with ground plane
GPS Gain	27 dB active

MECHANICAL

Length	130 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MDT. Connector type ( BNC, PL, TNC, N, F- ME, SMA). Connector GPS type ( SMA, FME, SMB...). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization with 1/4 wave configuration. The inbedded GPS antenna is active and offers 27 dB gain.

The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.



BLACK SPRING S4



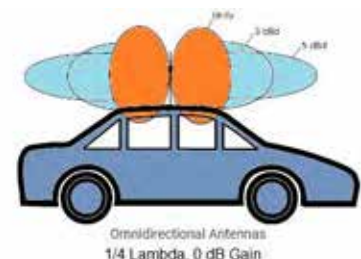
IN70-R



SPECIFICATIONS

ELECTRICAL	
Frequency Range	370-470 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB with ground plane
GPS Gain	27 dB active
MECHANICAL	
Length	30 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MAG. Connector type ( BNC, PL.TNC,N,F-ME,SMA). Connector GPS type ( SMA,FME, SMB...). With or W/O Spring (S4).







High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization with 5/8 wave configuration for long range performance. The inbedded GPS antenna is active and offers 27 dB gain. The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.



BLACK SPRING S4



IN70-R



## SPECIFICATIONS

### ELECTRICAL

Frequency Range	370-470 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB with ground plane
GPS Gain	27 dB active

### MECHANICAL

Length	55 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MDT. Connector type ( BNC, PL.TNC,N,F-ME,SMA). Connector GPS type ( SMA,FME, SMB...). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization with 1/2 over 1/4 wave colinear configuration for long range performance. The inbedded GPS antenna is active and offers 27 dB gain. The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.



BLACK SPRING S4



IN70-R



## SPECIFICATIONS

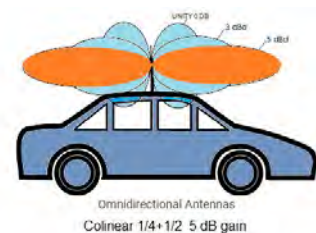
### ELECTRICAL

Frequency Range	370-470 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	4.5 dB with ground plane
GPS Gain	27 dB active

### MECHANICAL

Length	100 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MAG. Connector type ( BNC, PL, TNC, N, F, ME, SMA). Connector GPS type ( SMA, FME, SMB...). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base. The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



MOUNT C1



MOUNT T2



MOUNT M3



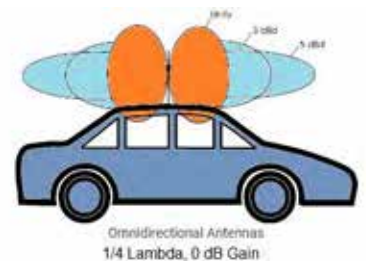
BLACK SPRING S4



SPECIFICATIONS

ELECTRICAL	
Frequency Range	66-88 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB
MECHANICAL	
Length	130 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount (C1,T2 or M3). Connector type ( BNC, PL.T-NC,N,FME,SMA). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base to obtain a 1/2 wave configuration, allowing the antenna to perform without ground plane on motorcycles and fiberglass rooftops. The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



MOUNT C1



MOUNT T2



MOUNT M3



BLACK SPRING S4



## SPECIFICATIONS

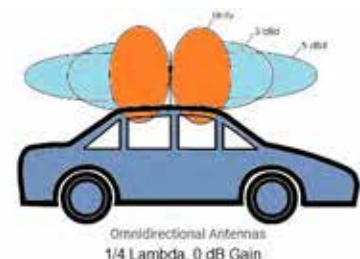
### ELECTRICAL

Frequency Range	136-174 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane

### MECHANICAL

Length	100 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount (C1,T2 or M3). Connector type ( BNC, PL, T-NC,N,FME,SMA). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base to obtain a 5/8 wave configuration, allowing the antenna to perform with 3 dB gain for long range operation. The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



MOUNT C1



MOUNT T2



MOUNT M3



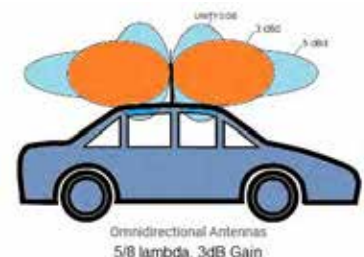
BLACK SPRING S4



SPECIFICATIONS

ELECTRICAL	
Frequency Range	136-174 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB
MECHANICAL	
Length	135 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount (C1,T2 or M3). Connector type ( BNC, PL-T-NC,N,FME,SMA). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base to obtain a 1/2 wave configuration, allowing the antenna to perform without ground plane on motorcycles and fiberglass rooftops. The inbedded GPS antenna is active and offers 27 dB gain. The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.



MOUNT C1



MOUNT T2



MOUNT M3



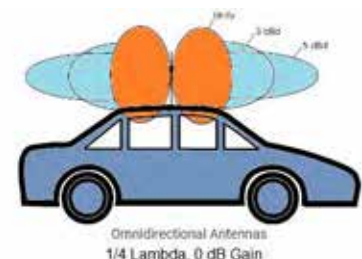
BLACK SPRING S4



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	370-512 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active
MECHANICAL	
Length	45 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount (C1,T2 or M3). Connector type ( BNC, PL, T-NC,N,FME,SMA). With or W/O Spring (S4).





High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base to obtain a 5/8 wave configuration, allowing the antenna to perform with 3 dB gain for long range operation. The antenna is supplied with 5.0 meter-long cable of the RG58/U type, which can terminate in any type of connector.



MOUNT C1



MOUNT T2



MOUNT M3



BLACK SPRING S4



SPECIFICATIONS

ELECTRICAL

Frequency Range	370-470 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	3 dB

MECHANICAL

Length	55 cm max.
Weight	0.4 Kg

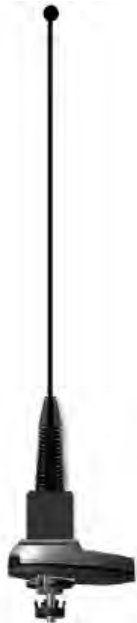
**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount (C1,T2 or M3). Connector type ( BNC, PL, T-NC,N,FME,SMA). With or W/O Spring (S4).



Dual mode GPS Mobile Antenna for the 66-88 MHz Band, 1575 Mhz in GPS



MGN BASE



MGN BASE  
WITH S4  
SPRING



BLACK SPRING S4



High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base to obtain a 1/2 wave configuration, allowing the antenna to perform without ground plane on motorcycles and fiberglass rooftops. The inbedded GPS antenna is active and offers 27 dB gain. The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.

## SPECIFICATIONS

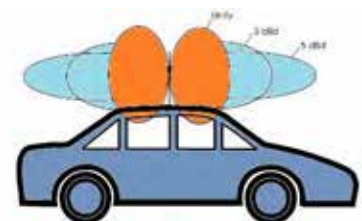
### ELECTRICAL

Frequency Range	66-88 MHz
Input power	110 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active

### MECHANICAL

Length	100 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MGN. Connector type ( BNC, PL, TNC, N, F- ME, SMA). Connector GPS type ( SMA, FME, SMB...). With or W/O Spring (S4).



Omnidirectional Antennas  
1/4 Lambda, 0 dB Gain



Dual mode GPS Mobile Antenna for the 136-174 MHz Band, 1575 Mhz in GPS



MGN BASE

MGN BASE  
WITH S4  
SPRING



BLACK SPRING S4



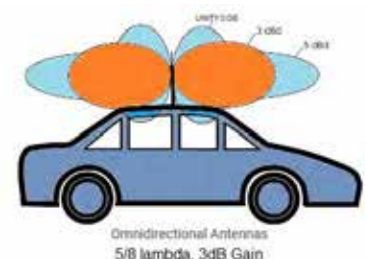
P25 TETRA DMR Complies with ROHS MADE IN EUROPE

High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base to obtain a 5/8 wave configuration, allowing the antenna to perform with long range 3 dB gain. The inbedded GPS antenna is active and offers 27 dB gain. The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.

SPECIFICATIONS

ELECTRICAL	
Frequency Range	136-174 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active
MECHANICAL	
Length	135 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MGN. Connector type ( BNC, PL.TNC,N,F-ME,SMA). Connector GPS type ( SMA,FME, SMB...). With or W/O Spring (S4).



Dual mode GPS Mobile Antenna for the 370-512 MHz Band, 1575 Mhz in GPS



MGN BASE

MGN BASE  
WITH S4  
SPRING



BLACK SPRING S4

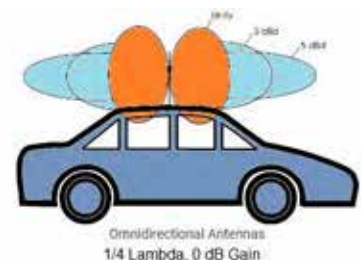


High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base to obtain a 1/2 wave configuration, allowing the antenna to perform without ground plane on motorcycles and fiberglass rooftops. The inbedded GPS antenna is active and offers 27 dB gain. The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.

## SPECIFICATIONS

ELECTRICAL	
Frequency Range	370-512 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active
MECHANICAL	
Length	55 cm max.
Weight	0.4 Kg

**When ordering, please, specify :** Exact Tx Rx frequencies. Antenna base mount MGN. Connector type ( BNC, PL.TNC,N,F-ME,SMA). Connector GPS type ( SMA,FME, SMB...). With or W/O Spring (S4).



Dual mode GPS Mobile Antenna for the 370-512 MHz Band, 1575 Mhz in GPS



High-performance radiator (conical 17-7 PH Black Chrome whip), which can be easily tuned by use of cutting chart. The antenna has vertical polarization and uses a loading coil with NMO base to obtain a 5/8 wave configuration, allowing the antenna to perform in long range with 3 dB gain. The inbedded GPS antenna is active and offers 27 dB gain. The antenna is supplied with 5.0 meter-long cable of the RG58/U type for RF and rg 174 for GPS, both cables can terminate in any type of connector.



BLACK SPRING S4



SPECIFICATIONS

ELECTRICAL	
Frequency Range	370-512 MHz
Input power	100 W
SWR	< 1.5 : 1
Impedance	50 Ω
Polarization	Vertical
Gain	0 dB without ground plane
GPS Gain	27 dB active
MECHANICAL	
Length	65 cm max.
Weight	0.4 Kg

**When ordering, please, specify:** Exact Tx Rx frequencies. Antenna base mount MGN. Connector type ( BNC, PL.TNC,N,F-ME,SMA). Connector GPS type ( SMA,FME, SMB...). With or W/O Spring (S4).



## CABLES, & CONNECTORS

We offer various solution of cable length with connectors.

### CABLES



Cable insertion loss is very important to the antenna installation. Please choose your cable carefully.

Cable type	Finish	Outer Diameter	Loss @ 450MHz	Loss @ 900MHz	Loss @ 1600MHz	Loss @ 1900MHz	Loss @ 2100MHz	Loss @ 2400MHz
		[mm]	[dB/100m]	[dB/100m]	[dB/100m]	[dB/100m]	[dB/100m]	[dB/100m]
RG174/U	Plastic	2.6	67	95	145	162	170	180
RG316/U	Teflon	2.5	60	85	120	135	142	150
RG316D	Teflon	3.0	60	85	120	135	142	150
RG58C/U	Plastic	5.0	38	55	80	88	93	100
RG223	Plastic	5.5	35	52	74	80	84	90
LTR195	Plastic	5.0	23	35	51	56	60	64
LTR240	Plastic	6.1	17	25	34	37	40	43
RG213/U	Plastic	10.3	16	22	32	34	35	38
LTR400	Plastic	10.3	8	12.5	18	19	20	22

### CONNECTORS



**BNC CONNECTORS**



**TNC CONNECTORS**



**N CONNECTORS**



**UHF CONNECTORS**



**SMA CONNECTORS**



**SMB CONNECTORS**



**MCX CONNECTORS**



**MMCX CONNECTORS**



**FME CONNECTORS**



**FAKRA CONNECTORS**

## EVERYTHING NEEDS TO BE CONNECTED MULTI-BAND & NARROWBAND

Portable antennas are often, by definition, mounted directly on the radio / transceiver (Radio transceivers, sensors, instruments, and other devices networked together with computers' industrial applications).

However, other mounting possibilities exist, for instance using wall brackets.

- $\frac{1}{4} \lambda$  Portable Antenna (mounted directly on the radio / transceiver)
- $\frac{1}{2} \lambda$  Portable Antenna for Portable Equipment (no ground plane needed)
- Portable antennas for HF, VHF and UHF frequencies.



## PORTABLE ANTENNAS

## VHF PORTABLE ANTENNAS 1/4 λ

(Mounted directly on equipment)

Model	Frequency	Gain	Type	Length	Item no.
CL27 ¼ (FME)	26.9 – 27.5 MHz	0 dBd	1/4 λ	520 mm	*14 111
CL30 ¼ (FME)	30 - 31 MHz	0 dBd	1/4 λ	475 mm	*14 136
CL40 ¼ (FME)	40 - 41 MHz	0 dBd	1/4 λ	390 mm	*14 144
HFBL27 (UHF-RA)	26.9 – 27.5 MHz	0 dBd	1/4 λ	520 mm	14 120
HFBL30 (UHF-RA)	30 - 31 MHz	0 dBd	1/4 λ	390 mm	14 150
HFBL40 (UHF-RA)	40 - 41 MHz	0 dBd	1/4 λ	310 mm	14 085
CL4M/L (FME)	64 – 74 MHz	0 dBd	1/4 λ	535 mm	14 088
CL4M/M (FME)	72 – 82 MHz	0 dBd	1/4 λ	465 mm	14 109
CL4M/H (FME)	80 – 90 MHz	0 dBd	1/4 λ	400 mm	14 110
CL4M/U (FME)	88 – 98 MHz	0 dBd	1/4 λ	290 mm	14 226
HE4M Universal (FME)	By cutting 66 – 88 MHz	0 dBd	1/4 λ	255 mm*	14 115
HE2M Universal (FME)	By cutting 144 – 225 MHz	0 dBd	1/4 λ	175 mm*	14 087
PT2M ¼ Universal (FME)	By cutting 135 – 185 MHz	0 dBd	1/4 λ	520 mm*	14 093
PT141.5 ¼ (ICOM-SMA)	129 – 152 MHz	0 dBd	1/4 λ	508 mm	14 511
PT144-164 ¼ (ICOM-SMA)	144 – 164 MHz	0 dBd	1/4 λ	455 mm	14 512
HE141.5 (ICOM-SMA)	133.5 – 149.5 MHz	0 dBd	1/4 λ	174 mm	14 514
HE155 (ICOM-SMA)	147 – 163 MHz	0 dBd	1/4 λ	159 mm	14 515
HUNTER-68 (FME)	64 – 74 MHz	0 dBd	1/4 λ	560 mm	14 252
HUNTER-68 (TNC)	64 – 74 MHz	0 dBd	1/4 λ	560 mm	14 255
HUNTER PT144-164 (SMA)	144 – 164 MHz	0 dBd	1/4 λ	460 mm	14 600

\* Comes also with adapter BNC-male, TNC-male and UHF-male fixed on antenna.

Antennas comes in bag but can be ordered as bulk. If you put IP behind item no (example 14 xxx **IP**).



## UHF PORTABLE ANTENNAS 1/4 $\lambda$

(Mounted directly on equipment)

Model	Frequency	Gain	Type	Length	Item no.
PT390 1/4 (FME)	380 – 430 MHz	0 dBd	1/4 $\lambda$	189 mm	14 139
PT420 1/4 (FME)	400 – 450 MHz	0 dBd	1/4 $\lambda$	181 mm	14 108
PT435 1/4 (FME)	420 – 470 MHz	0 dBd	1/4 $\lambda$	170 mm	14 332
PT450 1/4 (FME)	440 – 490 MHz	0 dBd	1/4 $\lambda$	165 mm	14 040
PT435 1/4 (SMA)	420 – 450 MHz	0 dBd	1/4 $\lambda$	160 mm	14 333
HE390 (FME)	380 – 410 MHz	0 dBd	1/4 $\lambda$	74 mm	14 099
HE420 (FME)	400 – 430 MHz	0 dBd	1/4 $\lambda$	75 mm	14 104
HE435 (FME)	420 – 450 MHz	0 dBd	1/4 $\lambda$	70 mm	14 105
HE450 (FME)	440 – 470 MHz	0 dBd	1/4 $\lambda$	70 mm	14 103
HE425 (ICOM-SMA)	410 – 440 MHz	0 dBd	1/4 $\lambda$	72 mm	14 516
HE445 (ICOM-SMA)	430 – 460 MHz	0 dBd	1/4 $\lambda$	70 mm	14 517
HE460 (ICOM-SMA)	445 – 475 MHz	0 dBd	1/4 $\lambda$	69 mm	14 518
PTHE435 1/4 (FME)	425 – 445 MHz	0 dBd	1/4 $\lambda$	80 mm	14 329
PTHE435 1/4 (SMA)	425 – 445 MHz	0 dBd	1/4 $\lambda$	70 mm	14 330
PT434/868 1/4 (FME)	434-438/868-870 MHz	0 dBd	1/4 $\lambda$	170 mm	14 710
PT434/868 1/4 (SMA)	434-438/868-870 MHz	0 dBd	1/4 $\lambda$	160 mm	14 712

\* Comes also with adapters as BNC-male, TNC-male and UHF-male fixed on antenna.

Antennas comes in bag but can be ordered as bulk. If you put IP behind item no (example 14 xxx **IP**).



PT390 1/4 (FME)	HE390 (FME)	HE425 (ICOM-SMA)	PTHE435 (FME)	PTHE435 (SMA)	PT434/868 (FME)	PT434/868 (SMA)
PT420 1/4 (FME)	HE420 (FME)	HE445 (ICOM-SMA)				
PT435 1/4 (FME)	HE435 (FME)	HE460 (ICOM-SMA)				
PT450 1/4 (FME)	HE450 (FME)					

## UHF PORTABLE ANTENNAS 1/4 λ

(Mounted directly on equipment)

Model	Frequency	Gain	Type	Length	Item no.
PT869 1/4 (FME)	860 – 870 MHz	0 dBd	1/4 λ	110 mm	14 338
PT869 1/4 (SMA)	860 – 870 MHz	0 dBd	1/4 λ	100 mm	14 340
PT900 1/4 (SMA)	890 – 960 MHz	0 dBd	1/4 λ	100 mm	14 024
PT-QUAD 1/4 (FME)	824-894 / 1850-1990 MHz	0 dBd	1/4 λ	110 mm	14 189
PT-QUAD 1/4 (SMA)	824-894 / 1850-1990 MHz	0 dBd	1/4 λ	100 mm	14 193
MINI-PT QUAD 1/4 (FME)	824-894 / 1850-1990 MHz	0 dBd	1/4 λ	52.2 mm	14 922
MINI-PT QUAD 1/4 (FME-RA)	824-894 / 1850-1990 MHz	0 dBd	1/4 λ	53.5 mm	14 924
MINI-PT QUAD 1/4 (SMA)	824-894 / 1850-1990 MHz	0 dBd	1/4 λ	42.5 mm	14 918
MINI-PT QUAD 1/4 (SMA-RP)	824-894 / 1850-1990 MHz	0 dBd	1/4 λ	43 mm	14 919
MINI-PT QUAD 1/4 (SMA-RA)	824-894 / 1850-1990 MHz	0 dBd	1/4 λ	55 mm	14 920
PT1900 1/4 (FME)	1850 – 1990 MHz	0 dBd	1/4 λ	53 mm	14 380
PT1900 1/4 (SMA)	1850 – 1990 MHz	0 dBd	1/4 λ	43 mm	14 381
PT-UMTS 1/4 (FME)	1920 - 2170 MHz	0 dBd	1/4 λ	53 mm	14 700
PT-UMTS 1/4 (SMA)	1920 - 2170 MHz	0 dBd	1/4 λ	53 mm	14 702
PT-UMTS 1/4 (SMA-RA)	1920 - 2170 MHz	0 dBd	1/4 λ	55 mm	14 704
PT2400 1/4 (FME)	2310 – 2485 MHz	0 dBd	1/4 λ	53 mm	14 345
PT2400 1/4 (SMA)	2310 – 2485 MHz	0 dBd	1/4 λ	43 mm	14 350
PT2400 1/4 (SMA-RA)	2310 – 2485 MHz	0 dBd	1/4 λ	55 mm	14 352

Antennas comes in bag but can be ordered as bulk. If you put IP behind item no (example 14 xxx **IP**).





## PORTABLE ANTENNAS 1/2 λ (no ground plane needed)

Model	Frequency	Gain	Type	Length	Item no.
PT390 1/2 (FME)	380 – 410 MHz	0 dBd	1/2 λ	475 mm	14 140
PT420 1/2 (FME)	400 – 430 MHz	0 dBd	1/2 λ	430 mm	14 079
PT435 1/2 (FME)	420 – 450 MHz	0 dBd	1/2 λ	405 mm	14 070
PT450 1/2 (FME)	440 – 470 MHz	0 dBd	1/2 λ	390 mm	14 026
PT869 1/2 (FME)	860 – 870 MHz	0 dBd	1/2 λ	195 mm	14 308
PT900 1/2 (FME)	860 – 960 MHz	0 dBd	1/2 λ	180 mm	14 017
PT1800 1/2 (FME)	1710 – 1880 MHz	0 dBd	1/2 λ	110 mm	14 218
PT1800 1/2 (SMA)	1710 – 1880 MHz	0 dBd	1/2 λ	100 mm	14 222
PT1900 1/2 (FME)	1850 – 1990 MHz	0 dBd	1/2 λ	110 mm	14 225
PT1900 1/2 (SMA)	1850 – 1990 MHz	0 dBd	1/2 λ	100 mm	14 227
PT-UMTS 1/2 (FME)	1920 – 2170 MHz	0 dBd	1/2 λ	110 mm	14 706
PT-UMTS 1/2 (SMA)	1920 – 2170 MHz	0 dBd	1/2 λ	100 mm	14 708
PT2400 1/2 (FME)	2310 – 2485 MHz	0 dBd	1/2 λ	110 mm	14 207
PT2400 1/2 (SMA)	2310 – 2485 MHz	0 dBd	1/2 λ	100 mm	14 205
PT820 1/2 (FME)	824-894 / 1710-2170 MHz	0 dBd	1/2 λ	170 mm	14 424
PT820 1/2 (SMA)	824-894 / 1710-2170 MHz	0 dBd	1/2 λ	160 mm	14 425
PT920 1/2 (FME)	880 - 960 / 1710 – 2170 MHz	0 dBd	1/2 λ	170 mm	14 420
PT920 1/2 (SMA)	880 - 960 / 1710 – 2170 MHz	0 dBd	1/2 λ	160 mm	14 421
PT800/1900 1/2 (FME)	824 - 894 / 1850 – 1990 MHz	0 dBd	1/2 λ	170 mm	14 230
PT800/1900 1/2 (SMA)	824 - 894 / 1850 – 1990 MHz	0 dBd	1/2 λ	160 mm	14 231
BLADE one	824 - 960 / 1710 – 2170 MHz	0 dBd	1/2 λ	157 mm	14 821

Antennas comes in bag but can be ordered as bulk. If you put IP behind item no (example 14 xxx **IP**).



PT390 1/2 (FME)  
PT420 1/2 (FME)  
PT435 1/2 (FME)  
PT450 1/2 (FME)

PT869 1/2 (FME)  
PT900 1/2 (FME)

PT1800 1/2 (FME)  
PT1900 1/2 (FME)  
PT-UMTS 1/2 (FME)  
PT2400 1/2 (FME)

PT1800 1/2 (SMA)  
PT1900 1/2 (SMA)  
PT-UMTS 1/2 (SMA)  
PT2400 1/2 (SMA)

PT820 1/2 (FME)  
PT920 1/2 (FME)  
PT800/1900 (FME)

PT820 1/2 (SMA)  
PT920 1/2 (SMA)  
PT800/1900 (SMA)

BLADE|one

## ADAPTERS



**BNC-male FME-male**  
A15 074 IP



**TNC-male FME-male**  
A15 075 IP



**UHF-male FME-male**  
A15 078 IP



**N-male FME-male**  
A15 079 IP



**SMA-male FME-male**  
A15 130 IP





HELICAL ANTENNAS





Flexible, conical steel helix moulded in flexible thermoplastic rubber. Optimum performance compared to physical dimensions. Tuned and tested to ensure minimum SWR and optimum performance. High quality materials in a smooth and slender design. Designed for use with different connectors.



BNC



5/16 - 32



SMA  
(female)



14x1  
/16x0.75/  
/15x0.75/



TNC



### ELECTRICAL

Frequency	66-88 MHz
Impedance	50 Ω
Max. Power	25 W
Gain	0 dBd
Length	250 mm
Cover	PVC mould



Flexible, conical steel helix moulded in flexible thermoplastic rubber. Optimum performance compared to physical dimensions. Tuned and tested to ensure minimum SWR and optimum performance. High quality materials in a smooth and slender design. Designed for use with different connectors.



BNC



5/16 - 32



SMA  
(female)



14x1  
/16x0.75/  
/15x0.75/



TNC



SPECIFICATIONS

ELECTRICAL	
Frequency	130-174 MHz
Impedance	50 Ω
Max. Power	25 W
Gain	0 dBd
Lenght	180 mm
Cover	PVC mould

Flexible, conical steel helix moulded in flexible thermoplastic rubber. Optimum performance compared to physical dimensions. Tuned and tested to ensure minimum SWR and optimum performance. High quality materials in a smooth and slender design. Designed for use with different connectors.



5/16 - 32



SMA  
(female)



SPECIFICATIONS

ELECTRICAL	
Frequency	130-174 MHz
Impedance	50 Ω
Max. Power	25 W
Gain	0 dBd
Length	95 mm
Cover	PVC mould



Flexible, conical steel helix moulded in flexible thermoplastic rubber. Optimum performance compared to physical dimensions. Tuned and tested to ensure minimum SWR and optimum performance. High quality materials in a smooth and slender design. Designed for use with different connectors.



BNC



5/16 - 32



SMA  
(female)



14x1  
/16x0.75/  
/15x0.75/



TNC

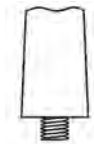


SPECIFICATIONS

ELECTRICAL	
Frequency	300-350 MHz
Impedance	50 Ω
Max. Power	25 W
Gain	0 dBd
Lenght	157 mm
Cover	PVC mould



Flexible, conical steel helix moulded in flexible thermoplastic rubber. Optimum performance compared to physical dimensions. Tuned and tested to ensure minimum SWR and optimum performance. High quality materials in a smooth and slender design. Designed for use with different connectors.



5/16 - 32



SMA  
(female)



SPECIFICATIONS

ELECTRICAL	
Frequency	300-350 MHz
Impedance	50 Ω
Max. Power	25 W
Gain	0 dBd
Length	95 mm
Cover	PVC mould





Flexible, conical steel helix moulded in flexible thermoplastic rubber. Optimum performance compared to physical dimensions. Tuned and tested to ensure minimum SWR and optimum performance. High quality materials in a smooth and slender design. Designed for use with different connectors.



BNC



5/16 - 32



SMA  
(female)



14x1  
/16x0.75/  
/15x0.75/



TNC



SPECIFICATIONS

ELECTRICAL	
Frequency	380-512 MHz
Impedance	50 Ω
Max. Power	25 W
Gain	0 dBd
Lenght	105 mm PVC
Cover	mould

Flexible, conical steel helix moulded in flexible thermoplastic rubber. Optimum performance compared to physical dimensions. Tuned and tested to ensure minimum SWR and optimum performance. High quality materials in a smooth and slender design. Designed for use with different connectors.



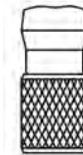
BNC



5/16 - 32



SMA  
(female)



14x1  
/16x0.75/  
/15x0.75/



TNC

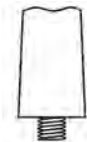


SPECIFICATIONS

ELECTRICAL	
Frequency	380-512 MHz
Impedance	50 Ω
Max. Power	25 W
Gain	0 dBd
Lenght	195 mm PVC
Cover	mould



Flexible, conical steel helix moulded in flexible thermoplastic rubber. Optimum performance compared to physical dimensions. Tuned and tested to ensure minimum SWR and optimum performance. High quality materials in a smooth and slender design. Designed for use with different connectors.



5/16 - 32



SMA  
(female)



## SPECIFICATIONS

ELECTRICAL	
Frequency	380-512 MHz
Impedance	50 Ω
Max. Power	25 W
Gain	0 dBd
Length	95 mm PVC
Cover	mould



The ANT-PA LTE-SMA is a compact LTE antenna which has an adjustable right angle SMA male connector. The antenna is ideal for use on 4G/3G modems or connecting on the cabinet via a bulkhead SMA female connector. The SMA connector includes a rubber bush to assist in weather protection.

- Compact design which is only 161mm long
- 90° adjustable right angle SMA male connector



SPECIFICATIONS

ELECTRICAL			
Frequency	698-960 MHz	1710-2170 MHz	2500-2700 MHz
Gain	1 dBi		2 dBi
VSWR	<3.5:1	<2.5:1	<3.5:1
Impedance		50 Ω	
Polarization		Vertical	
Max. Power		10 W	
Operating Temperature		-20 to +65	
MECHANICAL			
Dimensions	161(L) x 21(W) x 6(D) mm		
Radome Material	PU/PC		
Connector	SMA male (90° adjustable right angle)		
Weight	0.029 Kg		
Mounting	M10 stud & nut		



The PA 900 is a high performance 915MHz ISM band dipole omnidirectional antenna which is hinged allowing it to be position at the optimum angle. The antenna is available in either an SMA male or SMA reverse gender connector.

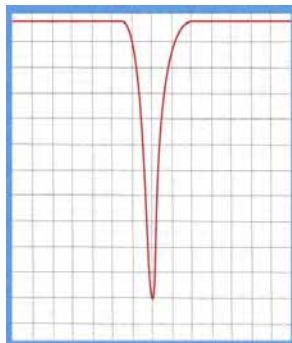
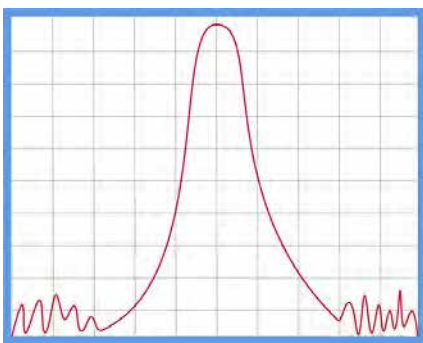
The PA 900 is ideal for application within ISM band such as LoRa and SIGFOX.

- Compact design – only 113mm long.
- 90° folding hinge.
- Available with either SMA male or SMA reverse gender connector.



SPECIFICATIONS

ELECTRICAL		
MODEL	PA 900-SMA	IPA 900 -SMA-RG
Band	915MHz ISM	915MHz ISM
Frequency	902-928 MHz	902-928 MHz
Gain	2 dBi	2 dBi
VSWR	2.5:1	2.5:1
Impedance	50 Ω	50 Ω
Polarization	Linear	Linear
MECHANICAL		
MODEL	ISM9-FA-SMA	ISM9-FA-SMA-RG
Material	ABS	ABS
Colour	Black	Black
Dimensions	10 (dia.) x 113 mm	10 (dia.) x 113 mm
Weight	0.013 Kg	0.013 Kg
Connector	SMA male	SMA reverse gender
Operating Temp.	-40° C to +85° C	-40° C to +85° C





FP-233 is a compact VHF band pass filter based on a 3 rectangular resonators. The filter can be applied to protect a receiver against interference from transmissions out of the passband, or it can be used to reduce spurious output from a transmitter.

Filters are tuned for customer on specified pass/reject frequencies and no further adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	26x26 mm
Frequency Range	136 -174 MHz
Attenuation -3 dB	2.5 Mhz
Attenuation -10 dB	6.5 Mhz
Attenuation -20 dB	12 Mhz
Insertion losses	< 1 dB
Max. continuous power input	50 W
Nominal impedance	50 Ω
SWR	< 1.5
Connector	N (female)
Temperature range	-30 ... +60 °C
Dimensions (H x W x D)	33x77x160 mm
Weight	0.42 Kg



Lambda FR-7033 is a compact “band pass – band reject” filters based on a 3 helical rectangular resonators. This filter can be used to protect a receiver against interference from a nearby transmitter. Pass/reject filters are useful when the spacing between RX frequency and the interfering signal so small, that the normal pass filters or reject filters are not enough to provide adequate rejections. Filters are tuned for customer on specified pass/reject frequencies and no further adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	23x23 mm
Frequency Range	38380-512 MHz
Duplex frequency spacing	4-10 Mhz
Max. continuous power input	50 W
Insertion loss	< 1,2 dB
Reject attenuation	> 75 dB
Nominal impedance	50 Ω
SWR	< 1.5
Connector	N (female)
Temperature range	-30 ... +60 °C
Dimensions (H x W x D)	33x77x163 mm
Weight	0.38 Kg





Lambda FR2-336 is a compact “band pass – band reject” filters based on a 6 helical resonators. This filter can be used to protect a receiver against interference from a nearby transmitter. Pass/reject filters are useful when the spacing between RX frequency and the interfering signal so small, that the normal pass filters or reject filters are not enough to provide adequate rejections. Filters are tuned for customer on specified pass/reject frequencies and no further adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	23x23 mm
Frequency Range	136 -174 MHz
Duplex frequency spacing	4-15 Mhz
Max. continuous power input	50 W
Insertion loss	< 2,5 dB
Reject attenuation	> 80 dB
Nominal impedance	50 Ω
SWR	< 1.5
Connector	N (female)
Temperature range	-30 ~ +60 °C
Weight	1.0 Kg



FP-7064 is a compact VHF band pass filter based on 6 rectangular resonators. The filter can be applied to protect a receiver against interference from transmissions out of the passband, or it can be used to reduce spurious output from a transmitter. Filters are tuned for customer on specified pass/reject frequencies and no further adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	23x23 mm
Frequency Range	380 - 512 MHz
Duplex frequency spacing	8-12 Mhz
Max. continuous power input	50 W
Insertion loss	< 1,2 dB
Reject attenuation	> 85 dB
Nominal impedance	50 Ω
SWR	< 1.5
Connector	N (female)
Temperature range	-30 ... +60 °C
Dimensions (H x W x D)	30x115x250 mm
Weight	1.0 Kg



Lambda CR-2-AQ is a VHF pass - reject filter based on a quarter wave 5 inches width single square cavity. Using of large cavities provides a high input power rating and means high Q (quality), resulting in a very narrow pass or reject bandwidth.

The cavity design provides frequency stability in temperature range from - 30 to + 60°C. Filters are tuned for customer's specified frequencies and no further adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	136 -174 MHz
Max. continuous power input	200 W
Number of cavities	1
Insertion loss	< 0,5 dB
ATT, dB@ pass-reject spacing	-38
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	880x130x130 mm
Weight	2.7 Kg



Lambda CR-2-AQ2 is a VHF pass - reject filter based on a quarter wave 5 inches width two square cavities. Using of large cavities provides a high input power rating and means high Quality, resulting in a very narrow pass or reject bandwidth.

The cavity design provides frequency stability in temperature range from - 30 to + 60°C. Filters are tuned for customer's specified frequencies and no further adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	136 - 174 MHz
Max. continuous power input	200 W
Number of cavities	2
Insertion loss	1 dB
ATT, dB@ pass-reject spacing	-75
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	880x130x260 mm
Weight	5.5 Kg



Lambda CR-2-AQ8 is a VHF pass - reject filter based on a quarter wave 8 inches width single square cavity. Using of large cavities provides a high input power rating and means high Quality, resulting in a very narrow pass or reject bandwidth.

The cavity design provides frequency stability in temperature range from - 30 to + 60°C. Filters are tuned for customer's specified frequencies and no further adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 8"
Frequency Range	136 - 174 MHz
Max. continuous power input	200 W
Number of cavities	1
Insertion loss	< 0,5 dB
ATT, dB@ pass-reject spacing	-40
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	880x210x210 mm
Weight	3.5 Kg



Lambda CR-2-AQ2 is a VHF pass - reject filter based on a quarter wave 5 inches two square cavity. Using of large cavities provides a high input power rating and means high Quality, resulting in a very narrow pass or reject bandwidth.

The cavity design provides frequency stability in temperature range from - 30 to + 60°C. Filters are tuned for customer's specified frequencies and no further adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	136 - 174 MHz
Max. continuous power input	200 W
Number of cavities	2
Insertion loss	1 dB
ATT, dB@ pass-reject spacing	-80
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	880x210x420 mm
Weight	7.1 Kg



Lambda CR-70-AQ is a UHF pass - reject filter based on a quarter wave 5 inches width single square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass or reject bandwidth.

The cavity design provides frequency stability in temperature range from - 30 to + 60°C. Filters are tuned for customer's specified frequencies and no further adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	380-512 MHz
Max. continuous power input	200 W
Number of cavities	1
Insertion loss	< 0,5 dB
ATT, dB@ pass-reject spacing	-25
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	400x130x130 mm
Weight	1.5 Kg



Lambda CR-70-AQ 2 is a UHF pass - reject filter based on a quarter wave 5 inches width two square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass or reject bandwidth.

The cavity design provides frequency stability in temperature range from - 30 to + 60°C. Filters are tuned for customer's specified frequencies and no further adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	380-512 MHz
Max. continuous power input	200 W
Number of cavities	2
Insertion loss	1 dB
ATT, dB@ pass-reject spacing	-52
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	400x130x260 mm
Weight	3.1 Kg





Lambda CR-70-8AQ is a UHF pass - reject filter based on a quarter wave 8 inches width single square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass or reject bandwidth. The cavity design provides frequency stability in temperature range from - 30 to + 60°C. Filters are tuned for customer's specified frequencies and no further adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 8"
Frequency Range	380-512 MHz
Max. continuous power input	200 W
Number of cavities	1
Insertion loss	< 0,5 dB
ATT, dB@ pass-reject spacing	-30
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	400x210x210 mm
Weight	2.0 Kg



Lambda CR-70-8AQ 2 is a UHF pass - reject filter based on a quarter wave 8 inches width two square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass or reject bandwidth. The cavity design provides frequency stability in temperature range from - 30 to + 60°C. Filters are tuned for customer's specified frequencies and no further adjustments should be required.



## SPECIFICATIONS

### ELECTRICAL

Cavity size	1/4λ, 8"
Frequency Range	380-512 MHz
Max. continuous power input	200 W
Number of cavities	2
Insertion loss	1 dB
ATT, dB@ pass-reject spacing	-68
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	400x210x420 mm
Weight	4.1 Kg



Lambda CP-2-AQ is a VHF band pass filter based on a quarter length 5 inches width single square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass band.

The cavity design provides excellent frequency stability in temperature range from – 30 to + 60 C°. Filters are tuned for customer specified frequencies and no future adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	136 - 174 MHz
Max. continuous power input	200 W
Number of cavities	1
(0.5dB insertion losses on central F)	-20/3
(2.0dB insertion losses on central F)	-40/3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	850x130x130 mm
Weight	2.7 Kg



Lambda CP-2-AQ 2 is a VHF band pass filter based on a quarter length 5 inches with two square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass band.

The cavity design provides excellent frequency stability in temperature range from – 30 to + 60 C°. Filters are tuned for customer specified frequencies and no future adjustments should be required.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	136 - 174 MHz
Max. continuous power input	200 W
Number of cavities	2
(0.5dB insertion losses on central Fx)	-50/2
(2.0dB insertion losses on central Fx)	-60/2
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	850x130x260 mm
Weight	5.5 Kg



Lambda CPF-2-8AQ is a VHF band pass filter based on a quarter length 8 inches width single square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass band.

The cavity design provides excellent frequency stability in temperature range from – 30 to + 60 C°. Filters are tuned for customer specified frequencies and no future adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 8"
Frequency Range	136 - 174 MHz
Max. continuous power input	200 W
Number of cavities	1
(0.5dB insertion losses on central Fx)	-20/2
(2.0dB insertion losses on central Fx)	-35/2
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	850x210x210 mm
Weight	3.5 Kg



Lambda CPF-2-8AQ 2 is a VHF band pass filter based on a quarter length 8 inches with two square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass band.

The cavity design provides excellent frequency stability in temperature range from - 30 to + 60 C°. Filters are tuned for customer specified frequencies and no future adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 8"
Frequency Range	136 - 174 MHz
Max. continuous power input	200 W
Number of cavities	3
(0.5dB insertion losses on central F)	-55/1
(2.0dB insertion losses on central F)	-65/1
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	850x210x420 mm
Weight	7.1 Kg



Lambda CPF-70-AQ is a UHF band pass filter based on a quarter length 5 inches wide single square cavity. Using of large cavities provides a high input power rating and means high Quality Factor, resulting in a very narrow pass band.

The cavity design provides excellent frequency stability in temperature range from  $-30$  to  $+60$  C°. Filters are tuned for customer specified frequencies and no future adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	$1/4\lambda$ , 5"
Frequency Range	380-512 MHz
Max. continuous power input	200 W
Number of cavities	1
(0.5dB insertion losses on central F)	-15/4
(2.0dB insertion losses on central F)	-25/4
Nominal impedance	50 $\Omega$
Connector	N (female)
Dimensions (H x W x D)	400x130x130 mm
Weight	1.5 Kg



Lambda CPF-70-AQ 2 is a UHF band pass filter based on a quarter length 5 inches with two square cavity. Using of large cavities provides a high input power rating and means high Q (quality Factor), resulting in a very narrow pass band.

The cavity design provides excellent frequency stability in temperature range from - 30 to + 60 C°. Filters are tuned for customer specified frequencies and no future adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	380-512 MHz
Max. continuous power input	200 W
Number of cavities	2
(0.5dB insertion losses on central Fx)	-45/4
(2.0dB insertion losses on central Fx)	-55/4
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	400x130x260 mm
Weight	3.1 Kg





Lambda CPF-70-8AQ is a UHF band pass filter based on a quarter length 8 inches width single square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass band.

The cavity design provides excellent frequency stability in temperature range from – 30 to + 60 C°. Filters are tuned for customer specified frequencies and no future adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 8"
Frequency Range	380-512 MHz
Max. continuous power input	200 W
Number of cavities	1
(0.5dB insertion losses on central Fx)	-15/2
(2.0dB insertion losses on central Fx)	-28/2
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	400x210x210 mm
Weight	2.0 Kg



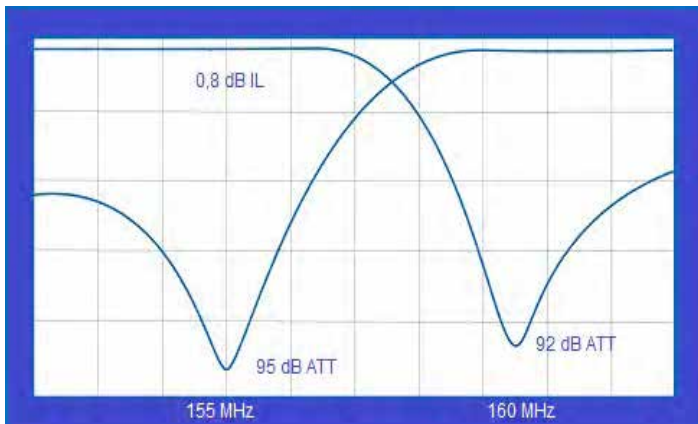
Lambda CPF-70-8AQ 2 is a UHF band pass filter based on a quarter length 8 inches with two square cavity. Using of large cavities provides a high input power rating and means high Quality factor, resulting in a very narrow pass band.

The cavity design provides excellent frequency stability in temperature range from - 30 to + 60 C°. Filters are tuned for customer specified frequencies and no future adjustments should be required.



## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 8"
Frequency Range	380-512 MHz
Max. continuous power input	200 W
Number of cavities	2
(0.5dB insertion losses on central F)	-45/2
(2.0dB insertion losses on central F)	-50/2
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	400x210x420 mm
Weight	4.1 Kg





- For use in repeaters and full duplex radios.
- Steel chassis with te lon isolators and aluminium extruded cavities.
- 6 cavities duplexer, 3 units for Tx and 3 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.
- Painted in black color or without paint.
- Low PIM -155dBc@2x43dBm using 4.3-10 conectors



**SPECIFICATIONS**

**ELECTRICAL**

Frequency	Order L : 66/77 MHz ; H : 77/88 MHz
Attenuation	> 90 dB
Frecuency Stability	9 ppm / °C
Insertion Loss	< 0.6 dB
Impedance	50 Ω
Max. Power	150 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	5 MHz

**MECHANICAL**

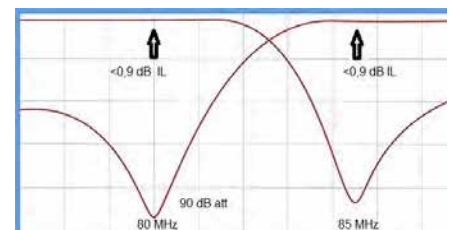
Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	310x180x55 mm
Connector	N female ; 4.3-10F Optional
Weight	2.4 kg

\* All specificstions are subject to change without previous notice.



**DUPT-462-L-H F**

19 inch rack mount versio





- For use in repeaters and full duplex radios.
- Steel chassis with te lon isolators and aluminium extruded cavities.
- 6 cavities duplexer, 3 units for Tx and 3 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.
- Painted in black color or without paint.
- Low PIM -155dBc@2x43dBm using 4.3-10 conectors



## SPECIFICATIONS

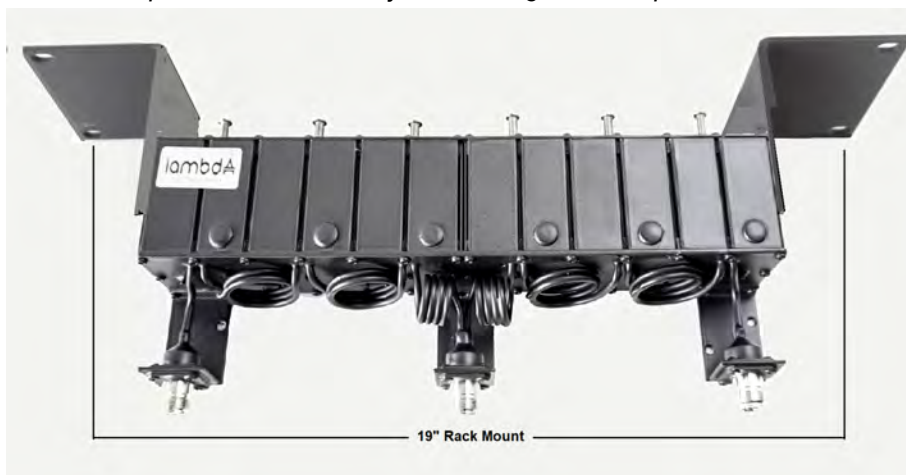
### ELECTRICAL

Frequency	136 - 174 MHz
Attenuation	> 90 dB
Frecuency Stability	9 ppm / °C
Insertion Loss	< 0.8 dB
Impedance	50 Ω
Max. Power	150 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	5 MHz

### MECHANICAL

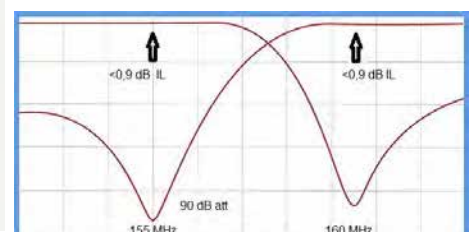
Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	310x180x55 mm
Connector	N female , 4.3-10 F Optional
Weight	2.0 kg

\* All specifications are subject to change without previous notice.



## DUPT-262-LH R

19 inch rack mount version





- For use in repeaters and full duplex radios.
- Steel chassis with te lon isolators and aluminium extruded cavities.
- 6 cavities duplexer, 3 units for Tx and 3 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.
- Painted in black color or without paint.
- Low PIM -155dBc@2x43dBm using 4.3-10 Conectors



## SPECIFICATIONS

### ELECTRICAL

Frequency	380 - 512 MHz
Attenuation	> 90 dB 9
Frecuency Stability	ppm / °C
Insertion Loss	< 1 dB
Impedance	> 50 Ω
Max. Power	150 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	10 MHz

### MECHANICAL

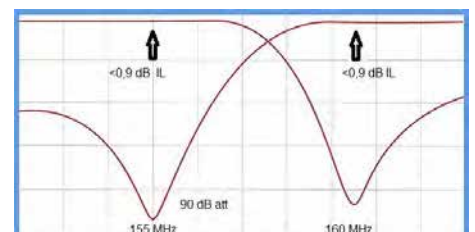
Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	310x240x55 mm
Connector	N female 4.3-10 optional)
Weight	2.5 kg

\* All specificstions are subject to change without previous notice.



## DUPT-7065-HL R

19 inch rack mount version





- For use in repeaters and full duplex radios.
- Steel chassis with teflon isolators and aluminium extruded cavities.
- 6 cavities duplexer, 3 units for Tx and 3 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.
- Painted in black color.



## SPECIFICATIONS

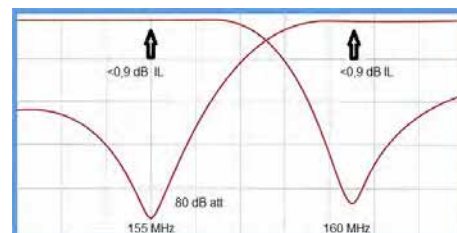
### ELECTRICAL

Frequency	136 - 174 MHz
Attenuation	> 80 dB
Frequency Stability	> 9 ppm / °C <
Insertion Loss	<1.4 dB
Impedance	50 Ω
Max. Power	50 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	5 MHz

### MECHANICAL

Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	211x156x33 mm
Connector	N female (other optional)
Weight	0.9 kg

\* All specifications are subject to change without previous notice.





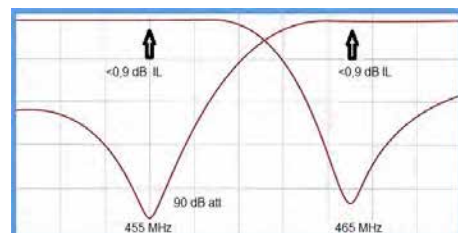
- For use in repeaters and full duplex radios.
- Steel chassis with te lon isolators and aluminium extruded cavities.
- 6 cavities duplexer, 3 units for Tx and 3 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.4.3-10
- Painted in black color.



SPECIFICATIONS

ELECTRICAL	
Frequency	380-512 MHz
Attenuation	> 90 dB
Frequency Stability	> 9 ppm /°C
Insertion Loss	< 0.9 dB
Impedance	> 50 Ω
Max. Power	50 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	10 MHz
MECHANICAL	
Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	240x156x33 mm
Connector	N female (other optional)
Weight	1.0 kg

\* All specificstions are subject to change without previous notice.







- For use in repeaters and full duplex radios.
- Steel chassis with teflon isolators and aluminium extruded cavities.
- 8 cavities duplexer, 4 units for Tx and 4 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.
- Painted in black color or without paint.



SPECIFICATIONS

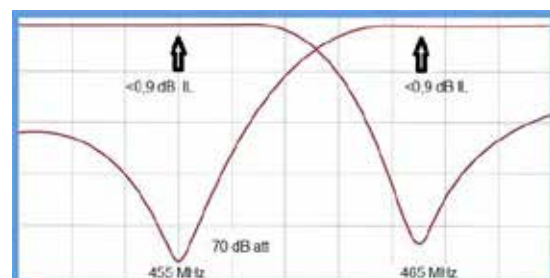
**ELECTRICAL**

Frequency	380-395 MHz
Attenuation	> 70 dB
Frequency Stability	20 ppm / °C
Insertion Loss	< 1.7 dB
Impedance	50 Ω
Max. Power	25 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	10 MHz

**MECHANICAL**

Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	50x156x40 mm
Connector	SMC female (other optional)
Weight	0.4 kg

\* All specificstions are subject to change without previous notice.





- For use in repeaters and full duplex radios.
- Steel chassis with teflon isolators and aluminium extruded cavities.
- 6 cavities duplexer, 3 units for Tx and 3 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.
- Painted in black color.



## SPECIFICATIONS

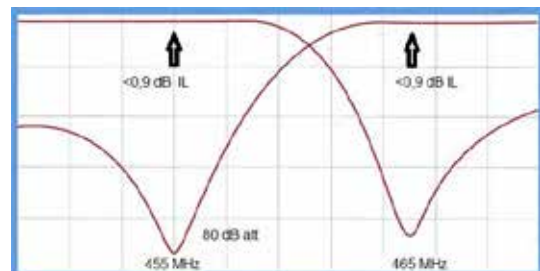
### ELECTRICAL

Frequency	380-512 MHz
Attenuation	> 75 dB
Frecuency Stability	9 ppm / °C
Insertion Loss	< 1.5 dB
Impedance	50 Ω
Max. Power	25 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	10 MHz

### MECHANICAL

Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	50x156x40 mm
Connector	SMA female (other optional)
Weight	0.4 kg

\* All specificstions are subject to change without previous notice.





- For use in repeaters and full duplex HYTERA 965 radios.
- Steel chassis with te Ion isolators and aluminium extruded cavities.
- 6 cavities duplexer, 3 units for Tx and 3 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.
- Painted in black color.



## SPECIFICATIONS

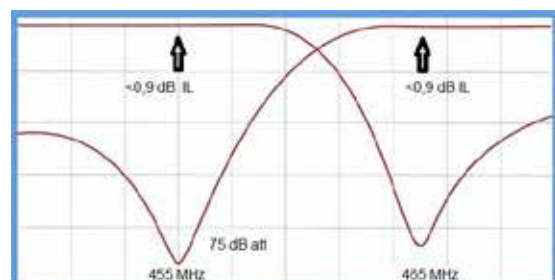
### ELECTRICAL

Frequency	380-512 MHz
Attenuation	> 75 dB
Frequency Stability	9 ppm / °C
Insertion Loss	< 1.5 dB
Impedance	50 Ω
Max. Power	25 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	10 MHz

### MECHANICAL

Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	50x156x40 mm
Connector	SMA female (other optional)
Weight	0.4 kg

\* All specifications are subject to change without previous notice.





- For use in repeaters and full duplex HYTERA 965 radios.
- Steel chassis with te lon isolators and aluminium extruded cavities.
- 6 cavities duplexer, 3 units for Tx and 3 units for Rx.
- High Q helical silver plated resonators.
- Easy tuning.
- Other connectors by order.
- Painted in black color.



## SPECIFICATIONS

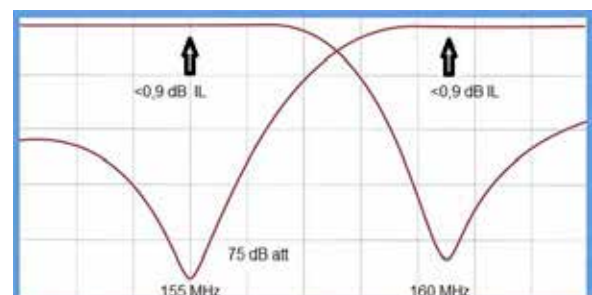
### ELECTRICAL

Frequency	136-174 MHz
Attenuation	> 75 dB
Frecuency Stability	> 9 ppm /
Insertion Loss	°C < 1.5 dB
Impedance	50 Ω
Max. Power	25 W
V.S.W.R.	≤ 1.5
Split Tx-Rx	5 MHz

### MECHANICAL

Temperature Range	-30 ~ +60 °C
Cavities	6
Dimensions	50x156x40 mm
Connector	SMA female (other optional)
Weight	0.4 kg

\* All specificstions are subject to change without previous notice.





Lambda DC-2AQ - is a band pass/reject type VHF duplex filter based on four quarter wave 5 inches width square cavities. Duplexer allows simultaneous operation of transmitter and receiver into a single antenna. Using large 5" cavities provides very high quality Factor resulting in very close frequency spacing and low insertion losses.

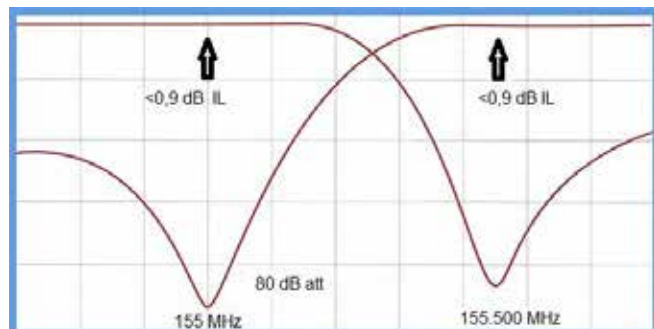
The cavity design provides excellent frequency stability in range from - 30 to + 60°C.

Each filter is individually made and tuned, so receive and transmit frequencies should be specified when ordering.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	136 - 174 MHz
Min. duplex frequency spacing	600 KHz 150
Max. continuous power input	W
Insertion loss	< 1.5 dB
Tx noise suppression on Rx frequency	> 75 dB
Rx isolation on Tx frequency	> 80 dB
Nominal impedance	50 Ω
VSWR	< 1.5
Connector	N (female)
Temperature range	-30 ~ +60 °C
Dimensions (H x W x D)	880x260x260 mm
Weight	9.5 Kg



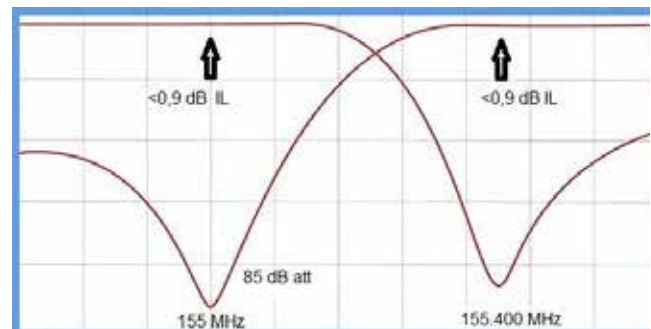


Lambda DC-2AQS - is a band pass/reject type VHF duplex filter based on six quarter wave 5 inches width square cavities. Duplexer allows simultaneous operation of transmitter and receiver into a single antenna. Using large 5" cavities provides very high quality, resulting in very close frequency spacing and low insertion losses. The cavity design provides excellent frequency stability in temperature range from - 30 to + 60°C. Each filter is individually made and tuned, so receive and transmit frequencies should be specified when ordering.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	136 - 174 MHz
Min. duplex frequency spacing	400 KHz 150
Max. continuous power input	W
Insertion loss	< 2 dB
Tx noise suppression on Rx frequency	> 85 dB
Rx isolation on Tx frequency	> 80 dB
Nominal impedance	50 Ω
VSWR	< 1.5
Connector	N (female)
Temperature range	-30 ~ +60 °C
Dimensions (H x W x D)	880x390x260 mm
Weight	13.5 Kg



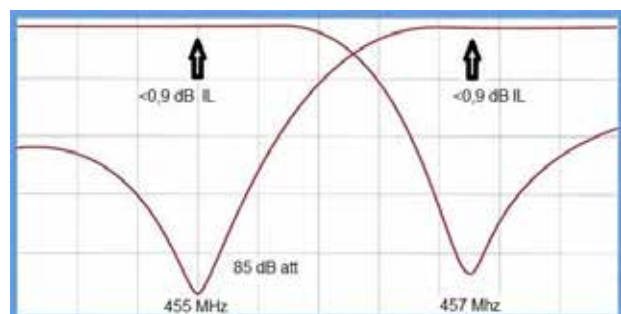


Lambda DC-70 AQ is a band pass/reject type UHF duplex filter based on four quarter wave 5 inches width square cavities. Duplexer allows simultaneous operation of transmitter and receiver into a single antenna. Using large 5" cavities provides very high quality, resulting in very close frequency spacing and low insertion losses. The cavity design provides excellent frequency stability in temperature range from - 30 to + 60°C. Each filter is individually made and tuned, so receive and transmit frequencies should be specified when ordering.



SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	380-512 MHz
Min. duplex frequency spacing	2000 KHz
Max. continuous power input	150 W
Insertion loss	< 1.5 dB
Tx noise suppression on Rx frequency	> 75 dB
Rx isolation on Tx frequency	> 85 dB
Nominal impedance	50 Ω
VSWR	< 1.5
Connector	N (female)
Temperature range	-30 ~ +60 °C
Dimensions (H x W x D)	400x260x260 mm
Weight	6.5 Kg



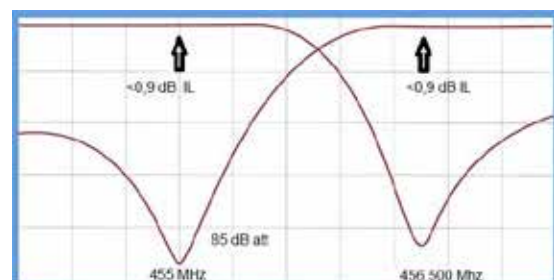


Lambda DC-70AQ S- is a band pass/reject type UHF duplex filter based on six quarter wave 5 inches width square cavities. Duplexer allows simultaneous operation of transmitter and receiver into a single antenna. Using large 5" cavities provides very high quality, resulting in very close frequency spacing and low insertion losses. The cavity design provides excellent frequency stability in temperature range from - 30 to + 60°C. Each filter is individually made and tuned, so receive and transmit frequencies should be specified when ordering.

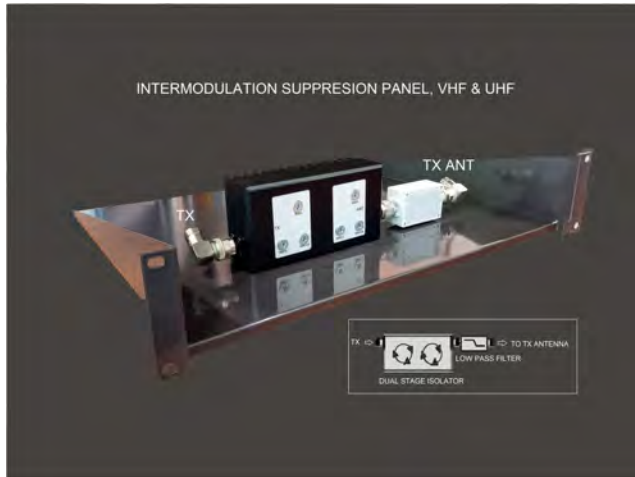


## SPECIFICATIONS

ELECTRICAL	
Cavity size	1/4λ, 5"
Frequency Range	380-512 MHz
Min. duplex frequency spacing	1500 KHz
Max. continuous power input	150 W
Insertion loss	< 2 dB
Tx noise suppression on Rx frequency	> 85 dB
Rx isolation on Tx frequency	> 85 dB
Nominal impedance	50 Ω
VSWR	< 1.5
Connector	N (female)
Temperature range	-30 ~ +60 °C
Dimensions (H x W x D)	400x390x260 mm
Weight	8.8 Kg









Lambda CTCH-22-50 series is a VHF hybrid combiner with single ferrite isolators used for combining 2 VHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	136 - 174 MHz
Max input power	50 W
Isolator	Single
Isolation Tx – Tx	> 60 dB
Insertion losses Tx – Ant	< 4 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	5.4 Kg



### SINGLE ISOLATOR 50 WATTS



Lambda CTHD-22-50 series is a VHF hybrid combiners with DUAL ferrite isolators used for combining 2 VHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth.

Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	136 - 174 MHz
Max input power	50 W
Isolator	Dual
Isolation Tx – Tx	> 80 dB
Insertion losses Tx – Ant	< 4.5 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	5.5 Kg



DUAL ISOLATOR 50 WATTS



Lambda CTHC-22-100 series is a VHF hybrid combiner with single ferrite iso-lators used for combining VHF transmitters into one antenna with close frequency spacing and 100 w input power. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth.

Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

### ELECTRICAL

Frequency Range	136 - 174 MHz
Max input power	100 W
Isolator	Single
Isolation Tx - Tx	> 60 dB
Insertion losses Tx - Ant	< 7.5 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	6.4 Kg



SINGLE ISOLATOR 100 WATTS

4 channels VHF hybrid combiner with single isolator for the 136 - 174 MHz Band



LambdaCTHC-24-50 series is a VHF hybrid combiners with SINGLE ferrite isolators used for combining 4 50 W VHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 2U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

### ELECTRICAL

Frequency Range	136 - 174 MHz
Max input power	50 W
Isolator	Single
Isolation Tx - Tx	> 80 dB
Insertion losses Tx - Ant	< 8 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	6.5 Kg



SINGLE ISOLATOR 50 WATTS

4 channels VHF hybrid combiner with single isolator for the 136 - 174 MHz Band



Lambda CTHD-24-50 is a VHF hybrid combiners with DUAL ferrite isolators used for combining 4 VHF, 50 W transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	136 - 174 MHz
Max input power	50 W
Isolator	DUAL
Isolation Tx - Tx	> 60 dB
Insertion losses Tx - Ant	< 4 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	5.4 Kg



DUAL ISOLATOR 50 WATTS

2 channels VHF hybrid combiner with dual isolator for the 136 - 174 MHz Band



Lambda CTHD-22-100 is a VHF hybrid combiners with DUAL ferrite iso-lators used for combining 2 VHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	136 - 174 MHz
Max input power	100 W
Isolator	Dual
Isolation Tx – Tx	> 80 dB
Insertion losses Tx – Ant	< 4.5 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	5.5 Kg



DUAL ISOLATOR 100 WATTS

4 channels VHF hybrid combiner with single isolator for the 136 - 174 MHz Band



Lambda CTHC-24-100 is a VHF hybrid combiners with SINGLE ferrite isolators used for combining 4 VHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	136 - 174 MHz
Max input power	100 W
Isolator	Single
Isolation Tx – Tx	> 60 dB
Insertion losses Tx – Ant	< 7.5 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	6.4 Kg



SINGLE ISOLATOR 100 WATTS



4 channels VHF hybrid combiner with dual isolator for the 136 - 174 MHz Band



Lambda CTHD-24-100 is a VHF hybrid combiners with DUAL ferrite iso-lators used for combining 4 VHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth.

Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	136 - 174 MHz
Max input power	100 W
Isolator	Dual
Isolation Tx - Tx	> 80 dB
Insertion losses Tx - Ant	< 8 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	6.5 Kg



DUAL ISOLATOR 100 WATTS

2 channels UHF hybrid combiner with single isolator for the 380-512 MHz Band



Lambda CTHC-702-50 is a UHF hybrid combiners with SINGLE ferrite isolators used for combining 2 UHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Max input power	50 W
Isolator	Single
Isolation Tx – Tx	> 60 dB
Insertion losses Tx – Ant	< 4 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	5.4 Kg



**SINGLE ISOLATOR 50 WATTS**

2 channels UHF hybrid combiner with dual isolator for the 380-512 MHz Band



Lambda CTHD-702-50 is a UHF hybrid combiners with single ferrite iso-lator used for combining 2 UHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Max input power	50 W
Isolator	Dual
Isolation Tx - Tx	> 80 dB
Insertion losses Tx - Ant	< 4.5 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	5.5 Kg



DUAL ISOLATOR 100 WATTS

4 channels UHF hybrid combiner with single isolator for the 380-512 MHz Band



Lambda CTHC-704-50 is a UHF hybrid combiners with SINGLE ferrite isolators used for combining 4 UHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Max input power	50 W
Isolator	Single
Isolation Tx – Tx	> 60 dB
Insertion losses Tx – Ant	< 7.5 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	6.4 Kg



**SINGLE ISOLATOR 50 WATTS**

4 channels UHF hybrid combiner with dual isolator for the 380-512 MHz Band



Lambda CTHD-704-50 is a UHF hybrid combiners with DUAL ferrite iso-lators used for combining 4 UHF transmitters into one antenna with close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Max input power	50 W
Isolator	Dual
Isolation Tx – Tx	> 80 dB
Insertion losses Tx – Ant	< 8 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	6.5 Kg



DUAL ISOLATOR 50 WATTS

2 channels UHF hybrid combiner with single isolator for the 380-512 MHz Band



Lambda CTHC-702-100 is a UHF hybrid combiners with SINGLE ferrite isolators used for combining 2 UHF transmitters into one antenna with 100 WATTS POWER and close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Max input power	100 W
Isolator	Single
Isolation Tx – Tx	> 60 dB
Insertion losses Tx – Ant	< 4 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	5.4 Kg



**SINGLE ISOLATOR 100 WATTS**

2 channels UHF hybrid combiner with dual isolator for the 380-512 MHz Band



Lambda CTHD-702-100 is a UHF hybrid combiners with DUAL ferrite isolators used for combining 2 UHF transmitters into one antenna with 100 WATTS POWER and close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Max input power	100 W
Isolator	Dual
Isolation Tx – Tx	> 80 dB
Insertion losses Tx – Ant	< 4.5 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	5.5 Kg



DUAL ISOLATOR 100 WATTS

4 channels UHF hybrid combiner with single isolator for the 380-512 MHz Band



Lambda CTHC-704-100 is a UHF hybrid combiners with SINGLE ferrite isolators used for combining 4 UHF transmitters into one antenna with 100 WATTS POWER and close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Max input power	100 W
Isolator	Single
Isolation Tx – Tx	> 60 dB
Insertion losses Tx – Ant	< 7.5 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	6.4 Kg



**SINGLE ISOLATOR 100 WATTS**



4 channels UHF hybrid combiner with dual isolator for the 380-512 MHz Band



Lambda CTHD-704-100 is a UHF hybrid combiners with DUAL ferrite isolators used for combining 4 UHF transmitters into one antenna with 100 WATTS POWER and close frequency spacing. Combiners are mounted on standard EIA 19" panel 3 U high and 355 mm depth. Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Max input power	100 W
Isolator	Dual
Isolation Tx – Tx	> 80 dB
Insertion losses Tx – Ant	< 8 dB
SWR	< 1.3
Nominal impedance	50 Ω
Connector	N (female)
Dimensions (H x W x D)	485x375x105 mm
Weight	6.5 Kg



**DUAL ISOLATOR 100 WATTS**

SPECIFICATIONS

ELECTRICAL	
Frequency Range	380-512 MHz
Impedance	50 Ω
V.S.W.R.	≤1,5
TX Specifications	
Insertion loss	Depending model (see table)
Isolation TX – TX	Serie CTHC-70X >55 dB (single isolator) Serie CTHCD-70X >75 dB (double isolator)
Max input power	50 W by channel
Min. Split between TX´s	7.5 KHz
Connectors	N female (2,3,4,6 or 8 TX to 1 antenna)
RX Specifications	
LNA gain	20 dB
Noise figure	2.0 dB
Max input power	12 dBm
Supply voltaje	Input 100-264 VAC output to LNA 12 VCC
Filter bandwidth	5 MHz
Current consumption	90 mA
Connectors	N female (2,3,4,6 or 8 TX to 1 antenna)
MECHANICAL	
Temperature	-10 / 65°C
Mounting	On rack tray 19" 450 mm Weight see table
Weight	Depending model (see table)



MODEL	CHANNELS	INSERTION LOSS	HEIGHT	WEIGHT
CTHC/MR-702	2	4	4 RU	4 RU
CTHCD/MR-702	2	4.2	4 RU	4 RU
CTHC/MR-703	3	5.5	4 RU	4 RU
CTHCD/MR-703	3	5.9	4 RU	4 RU
CTHC/MR-704	4	7.2	4 RU	4 RU
CTHCD/MR-704	4	7.6	4 RU	4 RU
CTHC/MR-706	6	9.8	6 RU	4 RU
CTHCD/MR-706	6	10.3	6 RU	4 RU
CTHC/MR-708	8	11.2	6 RU	4 RU
CTHCD/MR-708	8	11.8	6 RU	4 RU

Consult for more channels

Optional duplexer to use only 1 antenna for TX and RX			
MODEL	Bandwidth Tx & Rx	Minimum split Tx – Rx	Max. Power (add all Tx´s)
DU-7062	1.5 MHz	5 MHz	50 W
DUPT-7062	2.5 MHz	5 MHz	150 W
DUPT-7082	5 MHz	5 MHz	150 W





Lambda CTCC-24-50 series is low insertion loss combiners with ferrite isolators used for combining several transmitters into one antenna with up to 125 kHz (VHF) frequency spacing. Combiners are configured in sets of 2, 3 or 4 channels with 50 W input SWR < 1.5. Mounting option is specified by customer vertically or horizontally into EIA 19" etc.

Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL						
	CTCC-22-50	CTCD-22-50	CTCC-23-50	CTCD-23-50	CTCC-24-50	CTCD-24-50
Channels	2	2	3	3	4	4
Isolator	Single	Dual	Single	Dual	Single	Dual
Frequency Range	136 - 174 MHz	136 - 174 MHz	136 - 174 MHz	136 - 174 MHz	136 - 174 MHz	136 - 174 MHz
Max input power	50 W	50 W	50 W	50 W	50 W	50 W
Spacing Tx-Tx, kHz	>125	>125	>125	>125	>125	>125
Isolation Tx-Tx, dB	> 60 dB	> 80 dB	> 60 dB	> 80 dB	> 60 dB	> 80 dB
Insertion losses@Tx-Tx spacing	2.2@150	2.2@150	2.7@150	2.7@150	3.2@150	3.2@150
Nominal impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Connector	N - female	N - female	N - female	N - female	N - female	N - female
Dimensions (H x W x D) mm	850x420x210	850x420x210	850x630x210	850x630x210	850x420x420	850x420x420
Weight	7.8 Kg	8.5 Kg	11.5 Kg	12.2 Kg	16.1 Kg	17 Kg



SINGLE ISOLATOR 50 WATTS



DUAL ISOLATOR 50 WATTS



Lambda CTCC-24-100 series is low insertion loss combiners with ferrite isolators used for combining several transmitters into one antenna with up to 125 kHz (VHF) frequency spacing. Combiners are configured in sets of 2, 3 or 4 channels with 100 W input SWR < 1.5. Mounting option is specified by customer vertically or horizontally into EIA 19" etc.

Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

### ELECTRICAL

	CTCC-22-100	CTCD-22-100	CTCC-23-100	CTCD-23-100	CTCC-24-100	CTCD-24-100
Channels	2	2	3	3	4	4
Isolator	Single	Dual	Single	Dual	Single	Dual
Frequency Range	136 - 174 MHz	136 - 174 MHz	136 - 174 MHz	136 - 174 MHz	136 - 174 MHz	136 - 174 MHz
Max input power	100 W	100 W	100 W	100 W	100 W	100 W
Spacing Tx-Tx, kHz	>125	>125	>125	>125	>125	>125
Isolation Tx-Tx, dB	> 60 dB	> 80 dB	> 60 dB	> 80 dB	> 60 dB	> 80 dB
Insertion losses@Tx-Tx spacing	2.2@150	2.2@150	2.7@150	2.7@150	3.2@150	3.2@150
Nominal impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Connector	N - female	N - female	N - female	N - female	N - female	N - female
Dimensions (H x W x D) mm	850x420x210	850x420x210	850x630x210	850x630x210	850x420x420	850x420x420
Weight	7.8 Kg	8.5 Kg	11.5 Kg	12.2 Kg	16.1 Kg	17 Kg



SINGLE ISOLATOR 100 WATTS



DUAL ISOLATOR 100 WATTS



Lambda CTCC-704-50 series is low insertion loss combiners with ferrite isolators used for combining several transmitters into one antenna with up to 300 kHz (UHF) frequency spacing. Combiners are configured in sets of 2, 3 or 4 channels with 50W input ,SWR < 1.5. Mounting option is specified by customer vertically or horizontally into EIA 19" etc.

Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

### ELECTRICAL

	CTCC-702-50	CTCD-702-50	CTCC-703-50 CT	CD-7033-50	CTCC-704-50	CTCD-704-50
Channels	2	2	3	3	4	4
Isolator	Single	Dual	Single	Dual	Single	Dual
Frequency Range	380-512 MHz	380-512 MHz	380-512 MHz	380-512 MHz	380-512 MHz	380-512 MHz
Max input power	50 W	50 W	50 W	50 W	50 W	50 W
Spacing Tx-Tx	>300 KHz	>300 KHz	>300 KHz	>300 KHz	>300 KHz	>300 KHz
Isolation Tx-Tx, dB	> 60 dB	> 80 dB	> 60 dB	> 80 dB	> 60 dB	> 80 dB
Insertion losses@Tx-Tx spacing	2.3@150	2.3@150	2.8@450	2.8@450	3.3@450	3.3@450
Nominal impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Connector	N - female	N - female	N - female	N - female	N - female	N - female
Dimensions (H x W x D) mm	400x420x210	400x420x210	400x630x210	400x630x210	400x420x420	400x420x420
Weight	5 Kg	5.7 Kg	7.2 Kg	8 Kg	13 Kg	14 Kg



SINGLE ISOLATOR 50 WATTS



DUAL ISOLATOR 50 WATTS

UHF low insertion loss combiners with ferrite isolators for the 380-512 MHz Band



Lambda CTCC-704-100 series is low insertion loss combiners with ferrite isolators used for combining several transmitters into one antenna with up to 300 kHz (UHF) frequency spacing. Combiners are configured in sets of 2, 3 or 4 channels with 100 W input SWR < 1.5. Mounting option is specified by customer vertically or horizontally into EIA 19" etc.

Combiners are tuned at customer specified frequencies, so transmit frequencies should be specified when ordering.



## SPECIFICATIONS

ELECTRICAL						
	CTCC-702-100	CTCD-702-100	CTCC-7033-100	CTCD-7033-100	CTCC-704-100	CTCD-704-100
Channels	2	2	3	3	4	4
Isolator	Single	Dual	Single	Dual	Single	Dual
Frequency Range	380-512 MHz	380-512 MHz	380-512 MHz	380-512 MHz	380-512 MHz	380-512 MHz
Max input power	100 W	100 W	100 W	100 W	100 W	100 W
Spacing Tx-Tx	381-300 KHz	381-300 KHz	381-300 KHz	381-300 KHz	>300 KHz	>300 KHz
Isolation Tx-Tx, dB	> 60 dB	> 80 dB	> 60 dB	> 80 dB	> 60 dB	> 80 dB
Insertion losses@Tx-Tx spacing	2.3@150	2.3@150	2.8@450	2.8@450	3.3@450	3.3@450
Nominal impedance	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω	50 Ω
Connector	N - female	N - female	N - female	N - female	N - female	N - female
Dimensions (H x W x D) mm	400x420x210	400x420x210	400x630x210	400x630x210	400x420x420	400x420x420
Weight	5 Kg	5.7 Kg	7.2 Kg	8 Kg	13 Kg	14 Kg



SINGLE ISOLATOR 100 WATTS



DUAL ISOLATOR 100 WATTS



## SPECIFICATIONS

Impedance	50 Ω
R.O.E. / V.S.W.R.	≤1,5
LNA gain	20 dB
Noise figure	Max 2.0 dB
Input power	Max. 12 dBm
Supply voltage	+12-14 VCC
Consumtion	120mA
Temperature	-30 / 60°C
Connectors	N female
Mounting	Tray rack 19" x 450 mm x 4 RU

## SPECIFICATIONS

MODEL	FREQUENCY	CHANNELS	BAND WIDTH
MR-42	66-88 MHz	2	2 MHz
MR-44	66-88 MHz	4	2 MHz
MR-48	66-88 MHz	8	2 MHz
MR-A2	118-136 MHz	2	Complete Band
MR-A4	118-136 MHz	4	Complete Band
MR-A8	118-136 MHz	8	Complete Band
MR-22	136-174 MHz	2	3 MHz
MR-24	136-174 MHz	4	3 MHz
MR-26	136-174 MHz	6	3 MHz
MR-28	136-174 MHz	8	3 MHz
MR-702	380-512 MHz	2	5 MHz
MR-704	380-512 MHz	4	5 MHz
MR-706	380-512 MHz	6	5 MHz
MR-708	380-512 MHz	8	5 MHz



WE ARE READY  
WHEN CONNECTIVITY MATTERS  
ARE YOU?

**SCAN**  
ANTENNA®

**Denmark**

Literbuen 15  
DK-2740 Skovlunde  
+45 4333 1620  
info@scan-antenna.com

**Spain**

Calabozos 13, Factory 3  
28108 Alcobendas, Madrid  
+34 91 661 69 60  
comercial@scan-antenna.com

[www.scan-antenna.com](http://www.scan-antenna.com)