

Ultra-Ruggedized Antenna for GNSS / Satellitecommunications

Modell: Buoy



Features:

- Multiband helical antenne for GNSS and Satellite Telecommunications
- Perfect for objects in varying position like Ships
- Integrated Low-Noise-Amplifier (LNA)
- Excellent for use under harsh conditions
- Many options available
- Designed to MIL application

Description:

This ruggedized GNSS antenna is designed for mobile applications but also suitable for many stationary applications. The radiation pattern of this helical antenna provides excellent signal reception even when mounted on objects, like boats, submarines, helicopters or buoys. The total gain of the antenna is 33 dB to ensure signal reception of GNSS or satellite communications (depending on configuration) even under harsh conditions. Therefore the antenna could be ordered optionally with teflon coating which makes the antenna resistant against salt water and corrosion. It s even possible to install the antenna on a submarine (please ask us for maximum depth). This antenna is available with many different options (see page 2). This antenna is available in different colors.



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Technical Data:

	L1 GPS	RX Inmarsat/B1 or Thuraya	TX Inmarsat or Thuraya	GLONASS	IRIDIUM or TX Globalstar	L2 GPS for L1/L2 version
Frequencies:	1575.42 ± 15 MHz	1542.50 ± 12 MHz	1642.50 ± 17.5 MHz	1598 – 1609 MHz	1610 – 1626 MHz	1217 ± 15 MHz
Beam width (3dB):	173°/155°	173°/155°	180°/162°	180°/162°	180°/162°	120°/165°
Antenna gain (dBic) @ Zenith	+1.1 / +3.7	+0.7 / +1.5	-0.3 / -0.0	+0.5 / +2.9	+0.1 / +1.1	0.0
Antenna gain (dBic) @ 90° elevation	+0.3 / +2.0	-0.2 / +1.0	-0.8 / +0.4	+0.1 / +2.1	-0.7 / +1.1	-1.3 / -3.4
Polarization:	RHCP	RHCP or LHCP	RHCP or LHCP	RHCP	RHCP or LHCP	RHCP
Axial ratio:	1:3					1:5
Gain:	33 dB (only active, for GNSS and Rx)					
Radiation pattern:	Hemispherical					
VSWR Output:	max. 2.0 : 1					
LNA Noise Figure:	3 dB					
LNA P1dB Out:	13 dBm (input power level at which the gain ratio decreased by 1 dB)					
Power Supply:	2.5 – 24 Volt DC (only active)					
Consumption	>50 mA (only active)					
Power handling:	Passive: 10 Watt; LNA active = 1 Watt CW					
Material:	Aluminium alloy base with teflon finish					
Weight:	~ 226 g					
Altitude:	-200 to +21.000 m					
Acceleration:	30 g max.					
Environment cond .:	IP67 (hermetically sealed) / Skydrol resistant / UV stable / flame retardant / abrasion / corrosion resistance					
Temperature:	-70 ° C bis + 90 ° C					

Structure of part number - options:

Example: BINR-A-XT-U-FKM = Inmarsat/Iridium/L1/GIonass, RHCP, active, TNC-f, Teflon coating, flat/bracket mount

Housings:	Flat-bracket mount / Threaded pipe mount / Unthreaded pipe (-FKM / -TPM / -UPM)
Mounting options:	Antennena socket, threaded pipe (1 inch), set screws
Dimensions:	Depending on Housing, max ca. 150 (H) x 660 (L) x 660 (D) mm
Lightning Protections:	DC Grounding