

Datasheet Rx/Tx antenna Globalstar (108-00116-01)

Antenna Description

The 108-00116-01 antenna is a high-performance hybrid-fed antenna optimized for the globalstar transceiver, featuring a 32 × 16 mm helix antenna with two ports respectively operating at the globalstar Tx band (1610 – 1626.5 MHz) and Rx band (2483.5 - 2500 MHz). This technology provides exceptional pattern control, polarization purity, Tx to Rx isolation and high efficiency in a very compact form factor. It is ideal for satellite communication terminals, asset tracking, maritime and aviation systems, IoT gateways, and other globalstar-enabled devices requiring reliable global connectivity.

Passive Tx Antenna Electrical Specification (Typical)

Parameter	Specification
Frequency Range	1610 - 1626.5 MHz
Efficiency	56%
Peak Gain	1.8 dBiC (typical)
Axial ratio	3 dB (max) @ zenith
Impedance	50 Ω
VSWR	1.5:1 (max)
Polarization	LHCP
Cable length & Color	42 mm coax cable; White
Connector	U.FL connector

Active Rx Antenna Electrical Specification (Typical)

Parameter	Specification
Frequency Range	2483.5 - 2500 MHz
Passive Efficiency	55%
Polarization	LHCP
Axial ratio	3 dB (max) @ zenith
Total Gain	19.5 dBiC (typical)
VSWR	1.9:1 (max)
Current	8 mA (typical)
Voltage	2.8 V
Noise Figure	1.4 dB (typical)
Input P1dB	-15 dBm
Cable length & Color	65 mm coax cable; Black
Connector	U.FL connector

Mechanical Specification

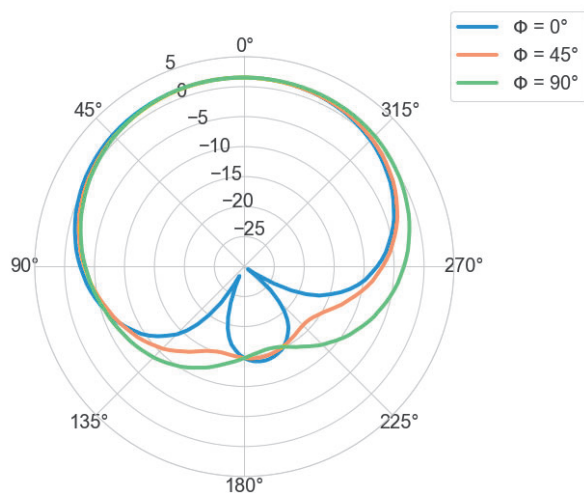
Parameter	Specification
Antenna Dimensions	32 (H) X 16 (OD) mm
Weight	2.7 grams
Operating Temperature	-40 °C to 85 °C



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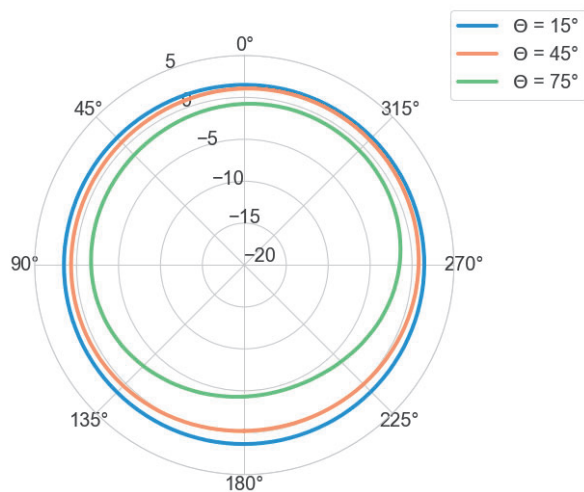
Radiation Patterns Tx

Tx band radiation patterns at 1618 MHz



LHCP Realized Gain [dBic] - Elevation cut

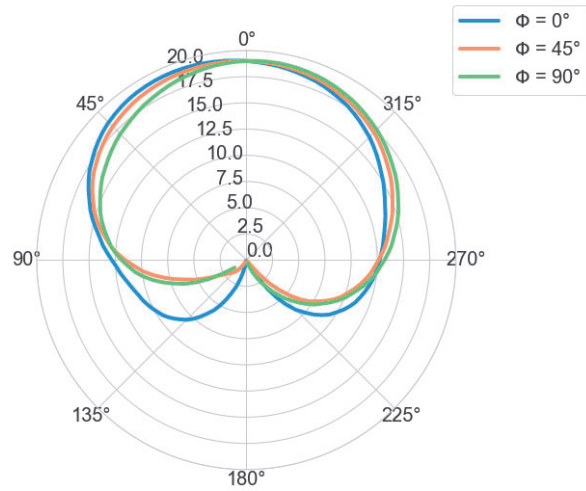
Tx band radiation patterns at 1618 MHz



LHCP Realized Gain [dBic] - Azimuth cut

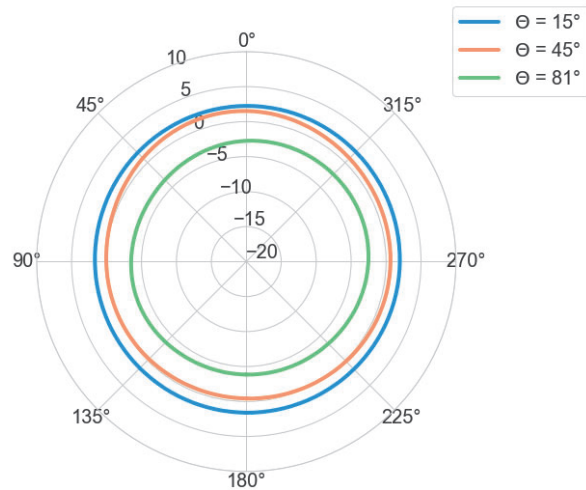
Radiation patterns Rx

Rx band radiation patterns at 2490 MHz



LHCP Realized Gain [dBic] - Elevation cut

Rx band radiation patterns at 2490 MHz



LHCP Realized Gain [dBic] - Azimuth cut

Axial ratios

