

AX3707

2D Choke Ring Antenna

Overview

The AX3707 is a 2D choke ring antenna with an integrated radome. It receives GPS L1/L2/L5 and L-band signals, GLONASS L1/L2/L3, BeiDou B1/B2/B3, Galileo E1/E5a/E5b/E6, QZSS L1/L2/L5/L6, IRNSS L5, SBAS L1/L5, which is ideal in CORS station and geodetic base station applications.

The AX3707 adopts unique wideband antenna technology design which provides superior low elevation satellite tracking, multipath reduction and sub-millimeter phase center stability. The new low noise amplifier (LNA) produces exceptional low measurement noise for superior measurement quality with excellent out of band rejection. The new LNA technology also has high gain which ensures the operation with long cable (100 meters plus).

Key features

Supports GPS L1/L2/L5/L-Band, GLONASS L1/L2/L3, BeiDou B1/B2/B3, Galileo E1/E5a/E5b/E6, QZSS L1/L2/L5/L6, IRNSS L5, SBAS L1/L5

Ideal for fixed reference stations and GNSS infrastructure networks

Water and dust-proof design ensures absolute seal of kernel part, capable for long time outdoor operation

Sub-millimetre phase centre repeatability, antenna gain has been optimized to allow use with most manufacturers geodetic receivers.

LNA has high gain which ensures the operation with long cable (100 metre +)



Technical Specifications

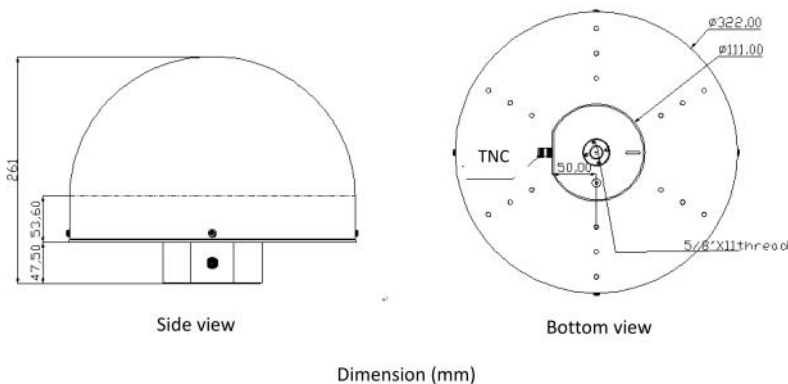
Performance

Signal Tracking:	
GPS L1/L2/L5/L-Band, GLONASS L1/L2/L3, BeiDou B1/B2/B3, Galileo E1/E5a/E5b/E6, QZSS L1/L2/L5/L6, IRNSS L5, SBAS L1/L5	
Impedance:	50Ω
Polarization:	RHCP
Axial Ratio:	≤2dB
Azimuth Coverage:	360°
Output VSWR:	≤2.0
Peak Gain:	6dBi
Phase Center offset:	0.6, -0.9, 122.0
Phase center accuracy:	±1mm

Environmental

Operating Temperature:	-40°C ~ +85°C
Storage Temperature:	-55°C ~ +85°C
Humidity:	95% not condensing

Structure Overview



LNA

LNA Gain:	50dB
Noise Figure:	≤2dB
Output VSWR:	≤2.0
Operation Voltage:	+3.3V~+12V DC
Operation Current:	≤60mA
Group Delay:	≤5ns

Mechanical

Size:	φ 332x261mm
Connector:	TNC Female
Weight:	≤ 5.6Kg

