

AX4E02



Full-Constellation Survey Antenna

Overview

The AX4E02 is a full-constellation survey antenna. It can receive GPS, GLONASS, BeiDou, Galileo, QZSS, SBAS and IRNSS signals, which can be used in land survey, marine survey, channel survey, seismic monitoring, bridge survey, container operation, agriculture applications, autonomous vehicles, and etc. The AX4E02 was calibrated in NGS and its high precision has been recognized.

The AX4E02 has high gain and wide beam width to ensure that connected GNSS receivers perform well at low elevation angle signals. The phase center of this antenna remains constant as the azimuth and the elevation angles of the satellites change. Signal reception is unaffected by the rotation of the antenna or satellite elevation, so placement and installation of the antenna can be completed with ease. It is ideal for challenging environments where high precision is needed, such as obstructed trees or constructions.

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, SBAS L1/L5 and IRNSS L5 signals

An internal multi-path-rejection board eliminates multi-path interference errors

Has a multi-feed design to ensure superposition of phase center and geometrical center, and minimize the influence of multipath errors

IP67 rated water and dustproof design

Internal lightning proof circuit protects LNA from being damaged by high voltage surges

Very low noise figure



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, SBAS L1/L5 and IRNSS L5
Impedance:	50Ω
Polarization:	RHCP
Axial Ratio:	≤3dB
Output VSWR:	≤2.0
Peak Gain:	≤5.5dBi
LNA Gain:	40dB (typical)
Noise Figure:	≤2dB
Operation Voltage:	3.3V~12V DC
Operation Current:	≤45mA
Group Delay Ripple:	<5ns
Phase Center Offset:	59.14mm
Phase Center Accuracy:	±2mm

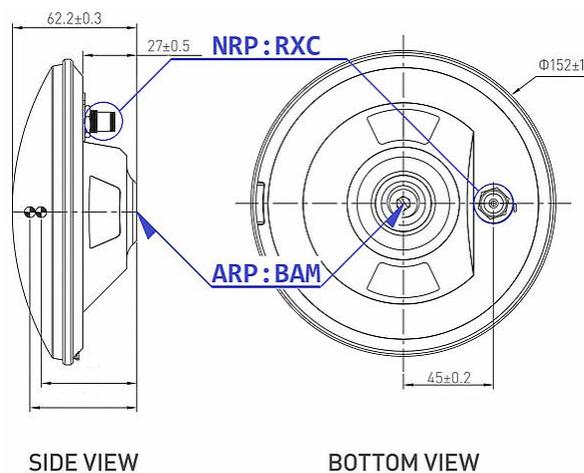
Mechanical

Dimension:	φ 152x62.2mm
Connector:	TNC Female
Screw Hole for assembly:	BSW 5/8"×11, 12-14mm
Weight:	≤500g

Environmental

Operating Temperature:	-40°C ~ +85°C
Storage Temperature:	-55°C ~ +85°C
Humidity:	95% non-condensing
Dustproof & waterproof:	IP67

Structure Overview



Website | www.tersus-gnss.com
Sales Inquiry | sales@tersus-gnss.com
Technical Support | support@tersus-gnss.com

