

# AX3706

## 3D Choke Ring Antenna

### Overview

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The AX3706 is a 3D choke ring antenna. It can receive GPS L1/L2/L5, GLONASS L1/L2, BeiDou B1/B2/B3, Galileo E1/E2/E5ab/E6 and L-band signals, which can be used in CORS, seismic monitoring, geodetic base station, agriculture applications and atmospheric studies, etc. The AX3706 was calibrated in NGS. Customers can use the antenna for GPS-only or four-constellation navigation applications.

The AX3706 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.

### Key features

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Supports GPS L1/L2/L5, GLONASS L1/L2, BeiDou B1/B2/B3, Galileo E1/E2/E5ab/E6, L-band

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3D structure design realizes excellent multipath rejection and low elevation tracking performance

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Sub-millimetre phase centre repeatability

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

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

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# Technical Specifications

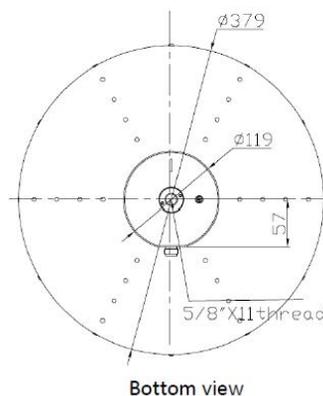
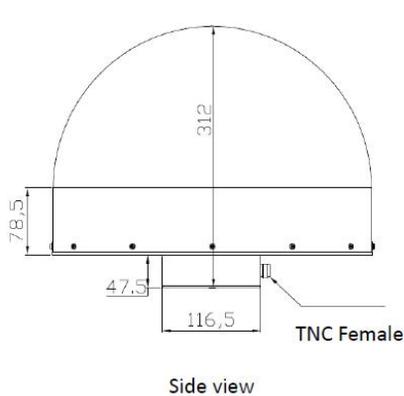
## Performance

Signal Tracking:	GPS L1/L2/L5, GLONASS L1/L2, BeiDou B1/B2/B3, Galileo E1/E2/E5ab/E6, L-band
Impedance:	50Ω
Polarization:	RHCP
Axial Ratio:	≤3dB
Azimuth Coverage:	360°
Output VSWR:	≤2.0
Peak Gain:	7dBi
Phase Center Error:	±1mm

## Environmental

Operating Temperature:	-45°C ~ +85°C
Storage Temperature:	-55°C ~ +85°C
Humidity:	95% not condensing

## Structure Overview



## LNA

LNA Gain:	50±2dB
Noise Figure:	≤2.0dB
Output VSWR:	≤2.0
Operation Voltage:	3V~18V DC
Operation Current:	≤60mA
Group Delay:	≤5ns

## Mechanical

Size:	φ 379x312mm
Connector:	TNC Female
Weight:	9.5Kg

