

Quadrifilar Helix antenna manual

Product Description

The G P 0 0 0 6 2 GNSS antenna adopts multi-arm coupling and four-feed-point feeding technologies. It supports the reception of L1 and L5 dual-band satellite navigation signals from the BeiDou-2, GPS, GLONASS, and GALILEO systems. Equipped with a built-in low-noise amplifier and multi-stage filters, it features excellent out-of-band rejection and strong anti-interference capability, ensuring stable operation in harsh electromagnetic environments. This antenna meets the current requirements for multi-system compatibility and high-precision measurement.

Suitable for applications with volume and weight requirements, such as drones, micro RTK, sub-metre handheld devices/tablets, and other portable devices.

Technical Features

- 1.The antenna uses multi-arm spiral technology to ensure right-hand circular polarisation and phase centre performance, reducing the impact of measurement errors.
- 2.The antenna unit has high gain and low gain roll-off characteristics, and performs well in receiving low-elevation satellite signals.
- 3.Sophisticated low noise, low power consumption, high gain amplification and excellent out-of-band suppression;
- 4.Compact size, lightweight, easy to carry and install.

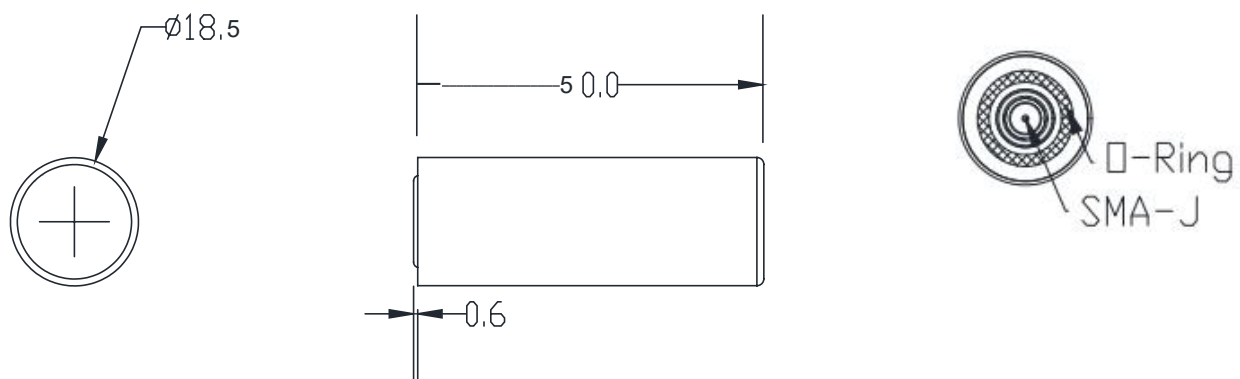
Main Technical Specifications (Typical)

Antenna characteristics	
Patch Architecture	Quadrifilar Helix
Supported positioning signal bands	B1/B2a; GPS: L1/L5; Galileo: E1/E5a GLONASS: L1
Peak Gain*	≥0 dBi
Polarization	RHCP
Axial Ratio@zenith	≤1.5dB
Azimuth Coverage	360°
Impedance	50 ohm
LNA	
Frequency Range	1176.45 ± 10.23MHz 1559MHz~1606MHz
LNA Gain*	25±3.0dB (Typ. @25°C)

Noise Figure*	≤1.5 dB@25°C , Typ.
Output VSWR	≤1.8:1 typ. 2.0:1max
Operation Voltage	3.0~6.0V DC,Recommended 3.3V or 5.0V
Operation Current	≤10mA
MECHANICALS & ENVIRONMENTAL	
Dimension	See attached figure.
Connector	SMA-J (Internal threaded needle)
Radome	ABS+PC
Weight	≤11g
Attachment Method	via connector
Operating Temp	-40 °C ~+85 °C
Storage Temp	-55 °C ~+85 °C
Humidity	95% No-condensing
Waterproof	IP67

Note: The sealing ring must be firmly pressed against the antenna support surface, which is the primary condition for achieving IP67 protection.

Structural dimensions (±0.3MM)



Product picture

