Full Frequency Helical Antenna



Product Information

Product Model: DY-AN9602A

Applicable Frequency Band: BDS: B1/B2/B3; GPS: L1/L2/L5

GLONASS: L1/ L2; Galileo: El/E5a/E5b/E6; IRNSS L5,L-band，

Product Usage

Adopting dobby multi feed point technology, it supports L1, L2/L5, and L-band satellite navigation signal reception for Beidou second-generation, GPS, GLONASS, and GALILEO systems. It is equipped with multi-level filters and low noise amplifiers, with good out of band rejection and strong anti-jamming ability, ensuring normal operation in harsh electromagnetic environments. Meet the current requirements for multi system compatibility and high-precision measurement. Meet the current requirements for multi system compatibility and high-precision measurement. Suitable for occasions with requirements for volume and weight, such as unmanned UAV, micro RTK, sub meter level handheld devices/tablets, and other portable devices.

Key Features

- The RHCP and phase center performance are ensured by using dobby helical technology, reducing influence of the measurement error.
- The antenna unit has the characteristics of high gain and small gain roll off, which is good for receiving low elevation satellite signals.
- Exquisite low noise, high gain amplification, and excellent out of band rejection.
- Small size and light weight are easy to carry and install.

Electrical Specifications (Passive Antenna)

Frequency Range	1164MHz~1278MHz & 1525MHz~1615MHz
Polarization	RHCP
Gain	≥2.5dBi (Elevation angle 90°)
Axial Ratio	≤1.5dB (Elevation angle 90°)

LNA Specification

Frequency Range	1164MHz~1278MHz & 1525MHz~1615MHz
LNA Gain	35±3.0dB
VSWR	≤2.0
Noise Figure	≤1.5 dB@25°C , Typ.
Voltage	3.0~12 VDC, recommend 3.3V or 5.0V
Working Current	≤45mA
Group Delay Variation	≤5ns

Mechanical Specifications

Output Connector	SMA-J (Internal Thread Needle)
Dimension	Φ43.5×40.8 mm
Material	ABS+PC
Weight	<29g
Operating Temperature	-40℃~+70 ℃
Storage Temperature	-45℃~+70 ℃
Installation	Through the bottom 3 screws
Waterproof Performance	IP67 Note: The sealing ring needs to be well pressed with the antenna support plane, which is the first condition to achieve IP67 protection level.

Diagram

