

ACTIVE GPS ANTENNA

Wide Out-of-Band Rejection, Anti-Jamming, Lightningproof GPS

The **Active GPS Antenna** is a high-performance outdoor antenna designed to provide reliable GPS signal reception for timing, synchronization, and location-based applications. Featuring an integrated low-noise amplifier (LNA), wide out-of-band signal rejection, and advanced anti-jamming characteristics, the antenna delivers strong, stable GPS performance even in challenging RF environments.

Built with a rugged, weatherproof enclosure and integrated lightning protection, the antenna is engineered for long-term outdoor deployment. Its compact form factor and included pole-mounting hardware make installation simple for gateways, network infrastructure, and industrial monitoring systems.



image #1

Certification



Antenna Electrical Specifications

Sales code		T0004536
#	Specification	Value
1	Frequency Range [MHz]	1556-1581
2	Gain [dBi]	38±2 (LNA Included)
3	Polarization	RHCP
4	Axis Ratio [dB]	<5
5	3dB beam width [°]	110±10
6	Front to Back Ratio [dB]	>10
7	DC Current [mA]	≤45
8	DC Voltage [V]	4-5.5
9	Connector	N type(F)

LNA Specifications

#	Specification	Value
1	Frequency Range [MHz]	1556-1581
2	Amplifier Gain [dB]	34±2
3	Flatness in Bandwidth [dB]	<2

4	Noise Figure [dB]	≤2.7
5	Out-of-Band Rejection [dBc]	12 (1531Hz;1605MHz) 35 (1511MHz;1625MHz) 70 (1461MHz;1675MHz)
6	VSWR	S11 ≤3.0 (Input); S22 ≤2.5(Output)
7	DC Voltage [V]	3.5~6
8	DC Current [mA]	≤45
9	1 dB the dot of the export	> 0
10	Anti-Surge Specifications	According GB/T 17626.5-1999; IDT IEC 61000-4-5:1995 Standard 5KA(8/20us)

Mechanical Specifications

#	Specification	Value
1	Radome Material	ASA
2	Dimensions [mm]	φ 82
3	Weight [Kg]	≤0.45 (Including the GPS clamp)
4	Waterproof	IP67
5	Operating Temperature [°C]	-40 ~ +75
6	Deposition Temperature [°C]	-40 ~ +100
7	Operating Humidity [%]	5%-100%
8	Circumstance	Out door

Installation

1. Installation of the Antenna

- 1.1 Diameter of the mounting pole is Φ30~60, Φ55 is recommended.
- 1.2 Installation tools: Adjustable wrench and spanner
- 1.3 Process of the antenna installation
 - 1.3.1 Open the packaging, takeout the antenna, the mounting kit and the mounting pipe;
 - 1.3.2 According to fig(1), insert the cable connector into the mounting pipe; connect the cable with the antenna connector and screw it down; connect the mounting pipe and the antenna, screw it down;
 - 1.3.3 According to fig(2),fix the antenna to the clamp with the fastening accessories and lock it down; fix the clamp to the mounting pole with the U shape clamp and the fastening accessories;
 - 1.3.4 All bolts and nuts must be tighten completely;
 - 1.3.5 Fix the cable to the mounting pole with the cable strip.

2. Remark

- 2.1 Don't install antenna when it is wet, rainy or windy.
- 2.2 Don't install antenna near the electrical power-lines.
- 2.3 All bolts and nuts must be tighten completely.

3. The antenna system must be maintained periodically:

- 3.1 Maintained once half a year.
- 3.2 If the fastening parts loose, tight them immediately.
- 3.3 Clean the dust away from the radome.

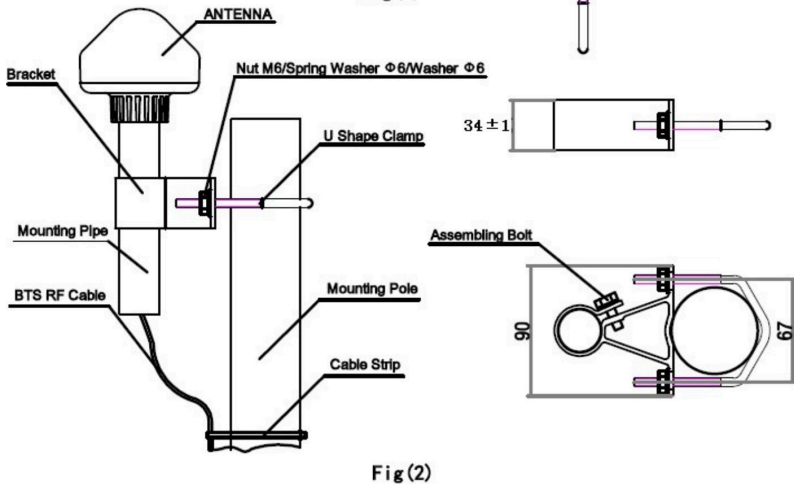
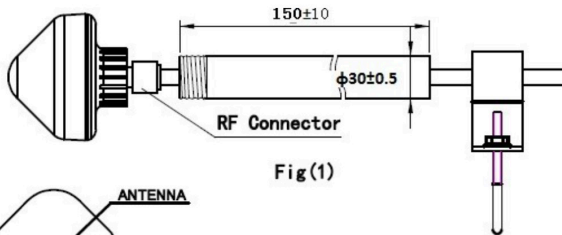


image #2