

GPS Antenna Datasheet

Overview

Description

The GPS Antenna is a high-gain and high-efficiency active antenna designed with lightning protection antistatic (LNA) feature. It is widely used in power base stations and marine positioning systems and supports 1559-1577 MHz frequencies.

Features

- Frequency: **1559-1577 MHz**
- Type: **Active Antenna**
- Gain: **28 ± 2 dB typical**
- Voltage: **$3\text{ V} \pm 0.3\text{ V}_{\text{DC}}$**
- Current: **$\leq 10\text{ mA}$ at 3 V**
- Polarization: **Right-hand Side Circular Polarization (R.H.C.P.)**
- Output impedance: **$50\ \Omega$**
- Connector: **N-type male**
- Cable: **$2\text{ m} \pm 50\text{ mm}$ RG195 Coaxial Cable**

Kit Inclusion

- 1x GPS antenna with cable
- 2x Mounting bracket with M6 nuts, washer, and spring washer
- 1x Mounting pole – 150 mm, $\Phi 25.6\text{ mm}$

Specifications

Hardware

Electrical Characteristics

Parameter	Value
Frequency	1559~1577 MHz
Voltage	DC 3 ±0.3 V
Current	≤ 10 mA at 3 V
Gain	28 ± 2 dB typical
Noise Figure	1.5 dB max
Bandwidth	18 MHz min
Output VSWR	3.0 max
Output Impedance	50 Ω
Dimensions	Φ 96×129 mm
Cable	2000 ± 50 mm (RG195)
Connector	N-type male

Environmental Characteristics

Operation Environment

Parameter	Value
Temperature	-40° ~ 85° C
Humidity	10% ~ 95% RH

Storage environment

Parameter	Value
Temperature	40° ~ 85° C
Humidity	10% ~ 95% RH

Mechanical Characteristics

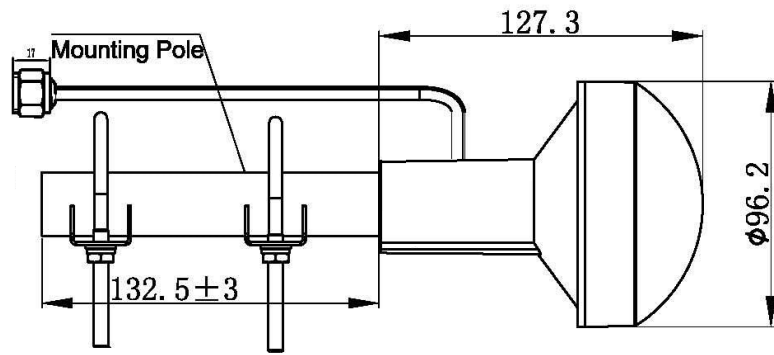


Figure 1: Antenna Dimensions

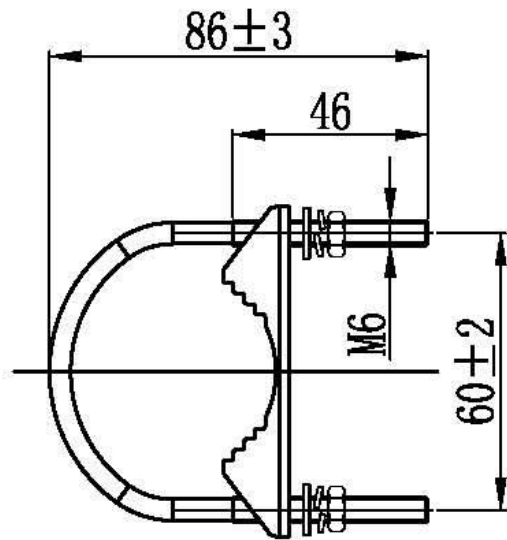


Figure 2: Mounting Bracket Dimensions