



## General Description

The Wonde Proud GPS-ANT380 is a small, lightweight, portable, and ready to use high quality GPS antenna. The GPS-ANT380 is waterproof and has a magnetic base making it ideal for vehicle mounted applications. Being an active antenna incorporates an LNA (low noise amplifier) that gives it far superior performance to passive equivalents.

For best performance, the antenna must be placed on a metal surface, such as the roof of a vehicle, so that a ground plane is formed.

## Specifications

### Antenna

Frequency range 1,575.42±1.023MHz  
Gain 90: 3.0 dBi min.  
20: -5.0 dBi min.  
(mounted on the 70mmx  
70mm square ground plane)

Polarization RHCP

Axial ratio 90: 3dB typical

Azimuth coverage 360 degrees

Elevation coverage 0 degree to 90 degrees

### LNA

Frequency range 1,575.42±1.023MHz  
Gain 28±3db (+25°C)  
28±5db (-40°C to 85°C)

Noise figure 1.5dB max (+25°C)  
2.5dB max. (+85°C)

Out of band rejection  $f_o=1,575.42\text{MHz}$   
 $f_o\pm 50\text{MHz}$  25db typical  
 $f_o\pm 100\text{MHz}$  35db typical

Reverse isolation 50dB typical

Output impedance 50Ω

Output VSWR 2.0max

## Key Features

- ◆ Low noise figure
- ◆ Fully waterproof
- ◆ Ultra low power consumption
- ◆ Compact construction
- ◆ Excellent temperature stability
- ◆ Magnetic mount base

# WONDE PROUD

Product Brief  
**GPS-ANT380**

## Overall specifications (through antenna, LNA, cable and connector)

Frequency range	1,575.42±1.023MHz
Gain	25±3dBi (25°C±5°C) 25±5dBi (-40°C to 85°C) (Mounted on the 70mmx70mm square ground plane) including cable loss
Output impedance	50Ω
VSWR	2.0max
Compression@ L1	-5dBm@LNA input

## General

### A. Environmental conditions

Operating temperature	-40°C to +85°C
Storage temperature	-40°C to +100°C
Relative humidity	20% to 95%

### B. Electrical specifications

Input voltage	2.5~4.5V
Power consumption	7mA typical@ 3.0v
Output connector	FME SMA
Cable	2m RG174/U (std.) 3m (optional)
Optional connector	FME MCX / SMB / SMC

### C. Mechanical specifications

Dimensions	L: 43mm W:33mm H:13.3mm
Weight	23.0g

### D. Others

Recommended storage condition	Temperature -20°C to 45°C Humidity 80% max
Waterproof	100% waterproof
Plastic color	Black

*All specifications are subject to change without notice*

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