GPS Antenna with Low Noise Amplifier

GPS Antenna GPS-ANT380





General Description

The Wonde Proud GPS-Ant380 is a small, light weight, 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) which 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.

Key Features

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

Specifications

Antenna		LNA	
Frequency range	1,575.42±1.023MHz	Frequency range	1,575.42±1.023MHz
Gain	90: 3.0 dBi min.	Gain	28±3db (+25°C)
	20: -5.0 dBi min.		28±5db (-40°C to 85°C)
	(mounted on the 70mmx		
	70mm square ground plane)		
Polarization	RHCP	Noise figure	1.5dB max (+25°C)
			2.5dB max. (+85°C)
Axial ratio	90: 3dB typical	Out of band rejection	fo=1,575.42MHz
			fo±50MHz 25db typical
			fo±100MHz 35db typical
Azimuth coverage	360 degrees	Reverse isolation	50dB typical
Elevation coverage	0 degree to 90 degrees	Output impedance	50Ω
		Output VSWR	2.0max

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		
Dimension	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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