

High Performance GPS Magnetic Mount Series

The AGPSHP high performance magnetic mount global positioning system (GPS) antennas utilize an electrically shielded LNA PCB assembly and ceramic filter designed to provide high out-of-band rejection for optimal integration in multi-band installations. Their assembly is permanently encased in a compact, UV-stable radome, making it ideal for concealed vehicle tracking applications.

Features

- Preselection filter for outstanding interference rejection
- Rugged, low profile housing for minimum visibility
- Two gain options for GPS system adaptability
- ESD/Reverse Polarity/Transit voltage protection



Electrical Specifications (Patch)

Model	Center Frequency	Polarization	Nominal Impedance	VSWR	Gain at Zenith	Axial Ratio
AGPSHP35MM	1575.42 MHz (GPS L1)	Right hand circular	50 ohms	1.5:1 typical	4 dBiC Nominal	3.0 dB typical
AGPSHP16MM	1575.42 MHz (GPS L1)	Right hand circular	50 ohms	1.5:1 typical	4 dBiC Nominal	3.0 dB typical

Mechanical Specifications

Dimensions (L x W x D)	Weight
2" x 1.77" x .55"	4.09 +/- 0.35 oz

Environmental Specifications

Operating Temperature Range	Storage Temperature Range	Operating Condition	Storage Condition
-40°C to +85°C	-40°C to +85°C	-40°C to +85°C temperature 10 to 95% RH humidity	-40°C to +85°C temperature 10 to 95% RH humidity

Electrical Specifications (Filter/LNA)

Housing: Black, UV-stable plastic
Amplifier Gain without Antenna Element and Cable: 35 dB +/- 4 (AGPSHP35MM) 16 dB +/- 3 (AGPSHP16MM)
Noise Figure (25°): 1.8 typical
Voltage: 3-5.5 V (internal regulated)
DC Current @ 5 Volts: 20 mA Nominal < 35 mA @ -40°C to +85°C (AGPSHP35MM) 20 mA maximum, 5 Vdc, 12 mA typical (AGPSHP16MM)
Filtering: Hybrid (including pre-selector)
Out-of-Band Signal Rejection: -40 dB @ +/- 50 MHz typical (AGPSHP35MM) -20 dB @ +/- 50 MHz typical (AGPSHP16MM)
Cable Pull Force: 10 lbf, minimum
Magnet Pull Force: 5 lbf, minimum
Cable: 17 ft RG-174/U
Connector: Male SMA (attached) standard
Mounting Method: 2 built-in rare earth Nd magnets

For other connector options, please refer to GPS Mobile Antenna Configurator Part Number Guide