GPS-NMO Mobile Mount, Low Profile Active, 28dB GPS Antenna

PCTEL's GPS active NMO mount antenna provides superior performance with the industry's smallest NMO mountable footprint. The GPS-NMO antenna features a custom tuned frequency ceramic patch element, 15 KV ESD circuit protection, a two stage low noise amplifier and a SAW filter, that provides excellent out-of-band signal rejection performance and consistently clear signal while minimizing loss-of-lock.

The GPS-NMO features an attractive, compact housing environmentally tested for both fixed or mobile applications. Its innovative tab design supports higher reliability and repeatable performance at GPS frequencies than button pin designs can provide. The product is available in black or white housing options to suit a wide variety of installation applications.

GPS-NMO
(left)

GPS-NMO-W
(right)

Features

- Attractive, low profile design for maximum overhead clearance
- 2.7 to 5 Volt operation
- 15 KV ESD circuit protection
- Mates with all 1-1/8"-18 thread NMO mounts, including 3/4" mounts

RF/Electrical Specifications

Center Frequency	Element Gain LNA Gain	Polarization	Current Draw
1575.42MHz ±10 MHz	1 dBic 28 dB	Right Hand Circular	9 mA @ 3.3V 15 mA @ 5V

Mechanical Specifications

Antenna Dimensions (diameter x height)	Weight	Shock	Vibration
1.5" x 1.8" (38 x 46 mm)	0.15 lbs (0.07 kg)	Vertical axis 50G, Other axes 30G	3 axis, sweep = 60 min 3 – 500 Hz random vibration

Environmental Specifications

Temperature Range	Humidity
-40°C to +85°C operating	95% max (non condensing)

Model Options

Model	Color	Mounting
GPS-NMO	Black Radome Black Base	Compatible with all 1-1/8"-18 thread NMOmounts, including 3/4" mounts*
GPS-NMO-W	White Radome Chrome Base	

*PCTEL is a leading designer and manufacturer of custom mobile mount assemblies. Please contact PCTEL Customer Service for your custom solutions.

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Low Noise Amplifier Specifications

Nominal Impedance: 50 Ohm
VSWR (nominal): 1.8:1
Nominal Gain: @ 3.3VDC: 28 dB @ 5VDC: 30 dB
Noise Figure: 1.5 dB (typical)
Voltage: 2.7 - 5 VDC
Out-of-band Rejection (typical): +/- 15 MHz: 5 dB +/- 20 MHz: 10 dB +/- 30 MHz: 32 dB +/- 40 MHz: 40 dB