High Rejection 40 dB with Enhanced Narrow Band Filtering

The GPS-TMG-HR-40N timing reference antennas feature a 40 dB amplifier and narrow band high rejection filtering specifically designed to support long-lasting, trouble-free deployments in congested cell-site applications with severe interference around the GPS L1 frequency.

The proprietary quadrifiliar helix design, coupled with multi-stage filtering provides superior out-of-band rejection and lower elevation pattern performance than traditional patch antennas.

The unique radome shape sheds water and ice, while eliminating problems associated with bird perching. The antenna may be purchased by itself or with pipe mounting hardware. Custom models or site kits options are also available. The antenna label and collar mount are color coded red for differentiation purposes.



GPS-TMG-HR-40N (Top)
GPS-TMG-MNT-R (Bottom left)
GPS-TMG-HR-40NCM (Bottom right)

STANDARD CONFIGURATION

Model	Connector	Mount	Radome
GPS-TMG-HR-40N	Type N Female (one - bottom fed)	Antenna Only. Does not include mounting hardware.	White
GPS-TMG-HR-40NCM		Includes red powder coated collar mount (GPS-TMG-MNT-R)	
GPS-TMG-HR-40NMSCL		Includes red collar mount (GPS-TMG-MNT-R) and 2-foot mounting pipe (P04268)	

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Model	Frequency Range	Antenna Gain	Amplifier Gain	Noise Figure	Current Draw
GPS-TMG-HR-40N	1575.42 +/-10 MHz	3.5 dBic	40 dB +/- 4 dB	≤ 3.8 dB @ +25°C (typ.) ≤ 4.5 dB @ +25°C (max.)	≤40 mA @ 5V

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued

Model	DC Voltage	VSWR	Nominal Impedance	Out-of-Band Rejection	ESD Protection	Polarization
GPS-TMG-HR-40N	3.0-12.0 V (operating) 28 V (survivability)	≤1.5:1	50 ohms	≥ 80 dB @ 1559 MHz ≥ 80 dB @ 1625 MHz	Level: 4 Contact Discharge: 8kV Air Discharge: 15 kV	Right hand circular

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions	Weight	Temperature Range	Humidity
GPS-TMG-HR-40N	5.0" H x 3.2" D (126 H x 81 mm)	0.6 lbs (0.3 kg)	- 40°C to + 85°C	95%