26 dB High Rejection Antenna with Enhanced Narrow Band Filtering

GNSS/GPS Antennas – Timing

GPS-TMG-HR-26N Series



Description

Timing reference antenna featuring narrow band and high rejection filtering for GPS applications facing severe interference.

Technologies

GPS L1

Features

- 26 dB amplifier
- Superior filtering and out-of-band rejection
- Unique radome sheds water, ice, and minimizes bird perching





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The GPS-TMG-HR-26 series timing reference antennas feature narrow band, high rejection filtering to support long-lasting, trouble-free deployments in congested cell-site applications with severe interference around the GPS 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 proprietary radome shape sheds water and ice, and eliminates bird perching problems.

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.

Features

- High performance: 26 dB amplifier
- Superior filtering Multi-stage, narrow band, high rejection filtering
- Unique design Quadrifiliar helix design and multi-stage filtering provide effective out-of-band rejection and lower elevation pattern performance than traditional patch antennas
- Weatherproof Unique radome shape sheds water and ice, and eliminates problems associated with bird perching

Certifications





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Standard Configuration

Model	Connector	Mount	Radome
GPS-TMG-HR-26N	N Female (one - bottom fed)	Antenna Only. Does not include mounting hardware. Includes red powder coated collar mount (GPS-TMG-MNT-R)	Color: White
GPS-TMG-HR-26NCM			

Electrical Specifications - GNSS Antenna (All Models)

Specification	Measurement	
Frequency Range	1575.42 ± 10 MHz	
LNA Gain	26.5 dB ± 3 dB	
Element Gain	3.5 dBic	
Out-of-Band Rejection	≥ 65 dB @ 1559 MHz ≥ 65 dB @ 1625 MHz	
VSWR	≤ 1.5:1 (typical)	
Noise Figure	$\leq 4.0 \text{ dB} (@ +25^{\circ}\text{C (typ.)})$ $\leq 4.5 \text{ dB} (@ +25^{\circ}\text{C (max.)})$	
Current Draw	< 40 mA @ 5V	
DC Voltage	Operating: 3.3- 12.0 V (regulated) Survival: 24 V	
Nominal Impedance	50 ohms	
Polarization	Right hand circular	

Mechanical and Environmental Specifications - All Models

Specification	Measurement
Dimensions	5.0" H x 3.2" D (126 H x 81 mm)
Weight	0.6 lbs (0.3 kg)
Housing Material	ASA
Temperature Range	- 40°C to + 85°C
Humidity	95%

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