

GPS-TMG-HR-26N, 26 dB Internal Amplifier With Enhanced Narrow Band Filtering

The GPS-TMG-HR-26 timing reference antennas feature a 26 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 quadrifilar helix design, coupled with multi-stage filtering provides superior out-of-band rejection and lower elevation pattern performance than traditional patch antennas.

Their 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 is color coded red for differentiation purposes.

This antenna is made of materials that fully comply with provisions stipulated by EU directives RoHS 2002/95/EC.

Antenna Element Electrical Specifications

Frequency Band	Antenna Gain	Nominal Impedance	VSWR	Polarization	Connector
1575.42 +/- 10 MHz	3.5 dBic	50 ohms	≤1.5:1	Right hand circular	N, female (one - bottom fed)

Mechanical Specifications

Antenna Dimensions	Shipping Dimensions	Antenna Weight	Shipping Weight	Radome Color
5.0" H x 3.2" D (126 H x 81 mm)	7.5" L x 4.4" W x 3.8" D (190 L x 112 x 96 mm)	0.6 lbs (0.3 kg)	1.9 lbs (0.9 kg)	White

Environmental Specifications

Temperature Range	Humidity
- 40°C to + 85°C	95%

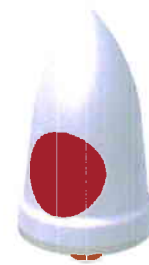
Mounting

All mounting options fit pipes of 1"-1.45" (25 mm-37 mm) maximum diameter.

Model	Options
GPS-TMG-HR-26N	Does not include mounting hardware.
GPS-TMG-HR-26NMS	Includes universal mounting hardware consisting of collar (GPS-TMG-MNT-R) and pipe clamp (GPS-TMG-LMNT).
GPS-TMG-HR-26NCM	Includes red powder coated collar mount (GPS-TMG-MNT-R)
GPS-TMG-HR-SPI-26NCB**	Integrated on-board surge protected version. Includes approved mounting and grounding components.

*Final specification subject to change

**Special order. Please contact PCTEL customer Service for ordering detail.



GPS-TMG-HR-26N



GPS-TMG-MNT-R



GPS-TMG-HR-26NCM



GPS-TMG-MRNMNT



GPS-TMG-LMNT



Low Noise Amplifier Specifications*

Frequency Band (MHz): 1575.42 +/- 1.2 MHz
Amplifier Gain: 26.5 dB +/- 3 dB
Nominal Impedance: 50 ohms
Output VSWR: < 2.0:1
Maximum Noise Figure: ≤ 4.5 dB @ +25°C including pre-selector
Operating DC Voltage: 3.3- 12.0 V (regulated)
Survival DC Voltage: 24V
DC Current: ≤ 40 mA @ 5V
Filtering: 4-stage filtering including pre-selector
Out-of-Band Rejection: ≥ 65 dB @ 1559 MHz ≥ 65 dB @ 1625 MHz
Lightening Protection Compliance: Per EN61000-4-5 Level 4



GPS-TMG-HR-40N



GPS-TMG-MNT-R GPS-TMG-HR-40NCM

GPS-TMG-HR-40N, 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 quadrifilar 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.

This antenna is made of materials that fully comply with provisions stipulated by EU directives RoHS 2002/95/EC.



Low Noise Amplifier Specifications

Frequency Band (MHz): 1575.42 +/- 1.2 MHz
Amplifier Gain: 40 dB +/- 4 dB
Nominal Impedance: 50 ohms
Output VSWR (3dB bandwidth): < 2.0:1
Noise Figure (including pre-selector): ≤ 3.8 dB @ +25°C (typ.) ≤ 4.5 dB @ +25°C (max.)
Operating DC Voltage: 3.3- 12.0 V (regulated)
Survival DC Voltage: 28V
DC Current: 32 mA @ 5V (typ.) 40 mA @ 5V (max.)
Filtering: 4-stage filtering including pre-selector
Out-of-Band Rejection: ≥ 80 dB @ 1559 MHz ≥ 80 dB @ 1625 MHz

Antenna Element Electrical Specifications

Frequency Band	Antenna Gain	Nominal Impedance	VSWR	Polarization	Connector
1575.42 +/- 10 MHz	3.5 dBic	50 ohms	≤1.5:1	Right hand circular	N, female (one - bottom fed)

Mechanical Specifications

Antenna Dimensions	Shipping Dimensions	Antenna Weight	Shipping Weight	Radome Color
5.0" H x 3.2" D (126 H x 81 mm)	7.5" L x 4.4" W x 3.8" D (190 L x 112 x 96 mm)	0.6 lbs (0.3 kg)	1.9 lbs (0.9 kg)	White

Environmental Specifications

Temperature Range	Humidity
- 40°C to + 85°C	95%

Mounting

All mounting options fit pipes of 1"-1.45" (25 mm-37 mm) maximum diameter.

Model	Options
GPS-TMG-HR-40N	Antenna Only. Does not include mounting hardware.
GPS-TMG-HR-40NCM	Includes red powder coated collar mount (GPS-TMG-MNT-R)

*Special order. Please contact PCTEL Customer Service for ordering detail and additional mounting options