GPS/AVIATION SPECIAL PURPOSE ANTENNAS

GPS Timing Reference Antennas



GPS-TMG-20N



GPS-TMG-MNT

GPS-TMG-LMNT



GPS-TMG-MRNMNT



Low Noise Amplifier Specifications

Frequency Band: 1575.42 center frequency 3 dB bandwidth +/- 10 MHz
Amplifier Gain: 20 dB +/- 3 dB
Nominal Impedance: 50 ohms
Output VSWR: < 2.0:1
Maximum Noise Figure: ≤ 2.5 dB @ +25°C including pre-selector
DC Voltage: 3.3 - 9.0 V (regulated)
DC Current: 20 mA, 30 mA max @ 5V
Polarization: Right hand circular
Filtering: 3 stage filters including pre-selector
Out of band rejection: -60 dB @ 1575.42 +/- 50 MHz

GPS-TMG-20N, 20 dB Internal Amplifier

The GPS-TMG-20 timing reference antennas are specifically designed for longlasting, trouble-free deployments in congested cell-site applications. Their 20 dB high gain amplifier is well suited to address attenuation issues associated with applications requiring longer cable runs.

The proprietary quadrifiliar helix design, coupled with multistage 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.

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

This antenna also features ESD, reverse polarity protection and transit voltage suppression.

Antenna Electrical Specifications

Frequency Band	Antenna Gain	Nominal Impedance	VSWR	Polarization
1575.42 +/- 10 MHz	3.5 dBic	50 ohms	< 1.5:1	Right hand circular

Connector	Input/Output
N, female (one - bottom fed)	 ESD protected Reverse polarity protection Transient voltage suppression on output

Mechanical Specifications

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

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-20N	Does not include mounting hardware.
GPS-TMG-20NMS	Includes universal mounting hardware consisting of collar (GPS-TMG-MNT) and pipe clamp (GPS-TMG-LMNT).
GPS-TMG-20NCS	Includes economy collar mount (GPS-TMG-MRNMNT).