GPS/AVIATION SPECIAL PURPOSE ANTENNAS

GPS Timing Reference Antennas



GPS-TMG-40N



GPS-TMG-MNT

GPS-TMG-LMNT



GPS-TMG-MRNMNT



Low Noise Amplifier Specifications

| Frequency Band (MHz): 1575.42 +/- 12 MHz |
|--|
| Amplifier Gain: 40 dB +/- 4 dB |
| Nominal Impedance: 50 ohms |
| Output VSWR: < 2.0:1 |
| Maximum Noise Figure: < 2.5 dB @ +25°C |
| DC Voltage: 3.3-9.0 V (regulated) |
| DC Current: ≤ 40 mA |
| Filtering: 3 stage filtering including pre-selector |
| Bandwidth: \geq 60 dB @ +/- 50 MHz off center frequency |
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GPS-TMG-40N, 40 dB Internal Amplifier

The GPS-TMG-40 timing reference antennas are specifically designed for longlasting, trouble-free deployments in congested cell-site applications. Their 40 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 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.

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 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 | Shipping | Antenna | Shipping | Radome |
|-----------------|--------------------------|----------|----------|--------|
| Dimensions | Dimensions | Weight | Weight | Color |
| 5.0" 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 n | nm-37 mm) maximum diameter. |
| | |

| Model | Options |
|---------------|--|
| GPS-TMG-40N | Does not include mounting hardware. |
| GPS-TMG-40NMS | Includes universal mounting hardware consisting of collar (GPS-TMG-MNT) and pipe clamp (GPS-TMG-LMNT). |
| GPS-TMG-40NCS | Includes economy collar mount (GPS-TMG-MRNMNT). |