GPS/AVIATION SPECIAL PURPOSE ANTENNAS

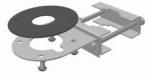
GPS Timing Reference Antennas



GPSL1GL-TMG-SP-40N



GPS-TMG-MHD



GPS-TMG-LMNT



Low Noise Amplifier Specifications

Frequency Band: 1590 ± 30 MHz
LNA Gain: 40 dB ± 4 dB @ GPSL1 GALILEO E1 38 dB± 4 dB @ GLONASS L1
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
DC Current: < 40 mA
Filtering: 3 stage filtering including pre-selector
Out of Band Rejection: ≥ -60 dB @ f ≤ 1530 MHz ≥ -60 dB @ f ≥ 1660 MHz
Lightening Protection: 90 V, 20 kA, 8/20 µS

40 dB GPS L1/GLONASSL1/GALILEO E1 Timing Antenna with Integrated Lightning Protection

The GPSL1GL-TMG-40N timing reference antennas are specifically designed for long-lasting, trouble-free deployments in congested cell-site applications. The low noise, 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.

The antenna provides integrated lightning protection capability.

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

Antenna Electrical Specifications

Frequency Band	Antenna Gain	Nominal Impedance	VSWR	Polarization	Connector
1575.42 ± 10 MHz 1602-1615 MHz	≥ 3.5 dBic ≥ 3 dBic*	50 ohms	<1.5:1	Right hand circular	N, female (one - bottom fed)

Mechanical Specifications

Antenna	Shipping	Antenna	Radome
Dimensions	Dimensions	Weight	Color
7.25" H x 3.2" D	7.5" L x 4.4" W x 3.8" D	0.75 lbs	White
(184 x 81 mm)	(190 x 112 x 96 mm)	(0.34 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
GPSL1GL-TMG-40N	Does not include mounting hardware.
GPSL1GL-TMG-SP-40NLM	Includes standard mounting hardware consisting of pipe clamp (GPS-TMG-LMNT).
GPSL1GL-TMG-SPS-40NCB	Includes heavy duty mount (GPS-TMG-MHD).