40 dB Amplifier with Integrated Lightning Protection

The GPSL1-TMG-SPI-40NCB 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 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 comes with surge compliant mounting that addresses industry grounding requirements. Custom models or site kit 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, on-board lightning protection capability that alleviates the need for downstream, in-line surge suppressors. The antenna also features ESD, reverse polarity protection and transit voltage suppression.

GPSL1-TMG-SPI-40NCB

STANDARD CONFIGURATION

Model	Connector	Mount	Radome
GPSL1-TMG-SPI-40NCB	N Female (one - bottom fed)	Medium duty mount (GPS-TMG-MMD), a grounding screw, and lug nut are included	Color: White

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Range	LNA Gain	Element Gain	Polarization	Out of Band Rejection
1575.42 ± 10 MHz	40 dB ± 4 dB	3.5 dBic	Right hand circular	≥ -60 dB @ ± 50 MHz off center frequency

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued

Noise Figure	Current Draw	DC Voltage	VSWR	Nominal Impedance
< 2.5 dB @ +25°C including pre-selector (maximum)	< 30 mA @ 5 V	3.3-9.0 V (operating) ≤ 28.0 V (survivability)	< 2.0:1	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Lightning Protection	Temperature Range	Humidity
7.25" H x 3.20" D (184 x 81 mm)	0.75 lbs (0.34 kg)	ASA	Per EN61000-4-5 Level 4	-40°C to +85°C	95%