

## 12700 Series, Airborne Antennas

The antennas in the MicroPulse™ 12700 series are robust, rigorously tested and environmentally sealed units suitable for a wide variety of GPS applications, including vehicle tracking, marine and airborne navigation.

These antennas have been tested to DO-160 environmental test requirements and are designed to meet Arinc 743 and FAA TSO-C129 specifications.

They feature a sealed o-ring that protects them against severe environmental conditions for reliable, long-lasting performance. Their radome is constructed of high grade polymer resin for UV and abrasion resistance. They will resist all de-icing fluids, jet fuels, and standard cleaning solvents.



12700 Series

### Antenna Electrical Specifications

#### Frequency Band

1575.42 +/-10 MHz (GPS L1)

#### Antenna Gain

+4.5 dBiC nominal @ zenith

#### Nominal Impedance

50 Ohms

#### VSWR

< 1.5:1

#### Polarization

Right hand circular

#### Grounding Protection

DC grounded

#### RF Input

TNC female

### Low Noise Amplifier Specifications

#### Frequency Band (MHz)

1575.42 +/-10 MHz (GPS L1)

#### Amplifier Gain

26 dB (Part #1270FW)

Passive (Part #1271FW)

35 dB (Part #1273FW)

#### Nominal Impedance

50 Ohms

#### Output VSWR

< 2.0:1

#### Maximum Noise Figure

2.5 dB Max

#### DC Voltage

5 to 28 VDC (volt. reg. 26.5, 35 dB ampls.)

#### DC Current @ 5V

25 mA typical, 40 mA Max (26.5 dB)

30mA typical, 50mA Max (35 dB)

28 mA Max (26 dB)

#### Filtering

Dual ceramic filters

### Mechanical Specifications

#### Antenna Dimensions

3.4" H x 2.2" W

#### Antenna Weight

3.6 oz. nominal

#### Radome Color

White

### Environmental Specifications

#### Temperature Range

-40°C to +85°C

#### Humidity

95%

### Mounting Method

Surface mount four hole pattern