

## 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.

### 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



12700 Series

### 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

For more information contact

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