

12100 Series, Airborne Puck Antennas

The antennas in the MicroPulse™ 12100 series are robust, rigorously tested and environmentally sealed units suitable for a wide variety of GPS applications. They are ideal for vehicle tracking, marine or airborne navigation installations requiring maximum security and durability.

These antennas have been tested to DO-160 environmental test requirements and are designed to meet Arinc 743 specifications. They feature dual o-ring seals that protect 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.

The antennas in this series are hard mounted through a unique single hole feed structure and include gaskets to prevent air and water leaks. They are available in passive form (no amplifier) or in a variety of active amplified gain configurations.



12100 Series

Antenna Electrical Specifications

Frequency Band

1575.42 +/-10 MHz (GPS L1)

Antenna Gain

+4.5 dBiC nominal @ zenith

Nominal Impedance

50 Ohms

VSWR

< 1.9:1

Polarization

Right hand circular

Grounding Protection

DC grounded

RF Input

TNC female

Low Noise Amplifier Specifications

Frequency Band (MHz)

1575 +/-10 MHz (GPS L1)

Amplifier Gain

26 dB (Part #1210FW)*

40 dB (Part #1213FW)

Nominal Impedance

50 Ohms

Output VSWR

2.0:1 maximum

Maximum Noise Figure

2.5 dB maximum

DC Voltage

5 to 28 VDC through connector

DC Current

25 mA typical, 40 mA Max (13 and 26.5 dB)

40 mA typical, 60 mA Max (40 dB)

Filtering

Dual ceramic filters

Mechanical Specifications

Antenna Dimensions

2.7" OD x 0.75" D

Antenna Weight

3 oz. nominal

Radome Color

White

NATO Stock Number

5820 99 147 2772 (for 1213FW only)

Environmental Specifications

Temperature Range

-40°C to +85°C

Humidity

95%

Mounting Method

Through hole 5/8-18UNC-2A thread

* Also available with 6" pigtail (part #1210FW-6)