GPS/AVIATION SPECIAL PURPOSE ANTENNAS GPS Smart Antennas with Integrated Receivers

GPS Receiver + Antenna Permanent Mount with Digital Interface RS232 Terminations

The 5072D-RD Series GPS Receiver + Antenna incorporates a 16-channel high sensitivity receiver with fast, first time to GPS fix. This, coupled with position information maintained over power cycles, provides immediate and accurate position reporting. All models in the 5072D-RD series all come with a CMOS to RS232 adapter cable connected by two, 4-pin DIN connectors for ease in installation. The 5072D-RD Series is designed for permanent mounted installations requiring a 3/4" thru-hole.

Features

- Plug and Play GPS tracking
- Simple Interface to Data-Ready Radios
- NMEA RMC message output
- Maintains position over power cycles
- RS232 (TTL interface option)
- Thru-hole mount for permanent installations
- Rugged weatherproof IP67 housing

RF/Electrical Specifications

Frequency Range	Nominal Gain	Polarization	Voltage
1575.42 MHz	3 dBic @ 90° -2.0 dBic @ 20°	Right Hand Circular	8 to 18 VDC

Mechanical Specifications

Antenna Dimensions (diameter x height)	Weight *	Housing	Mounting
2.36" x .83" (60 x 21 mm)	.23 lbs (104 g)	GE Lexan EXL9330	¾" thru-hole

Environmental Specifications

Temperature Range	Humidity
-40°C to +85°C operating (-45°C to +85°C storage)	95% max (non-condensing)

Interface/Connector

Model	Interface/Connector Description
5072D-RD9	RS232/DB9 Male with 5 meter cable
5072D-RD15	RS232/DB15 Male with 5 meter cable
5072D-RD25	RS232/DB25 Male with 5 meter cable

* Does not include adapter cable



5072D



RD9 (left) and RD15 (right) Connectors



RD25 Connector



GPS Performance

Frequency: L1, 1575.42 MHz
Channels: 16 channels parallel
Sensitivity: Acquisition: -146dBm Tracking: -159dBm
Accuracy: 2m (autonomous) <1 metre (SBAS)
Time to First Fix: Cold start: 39 sec Warm start: 34sec Hot start: 2.5 sec Reacquisition <1 sec
Serial Protocol: Output: NMEA 0183 Baud Rate: 4800 bps (default), user configurable up to 115kbps Update Rate: 1Hz NMEA Message: GGA, VTG, GSA, GSV, RMC