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## AV-801 External Aircraft Antenna for GPS Receivers

### Description

A permanently mounted FAA TSO'd C190 active GPS aircraft antenna designed for use with handheld or panel mounted GPS receivers. It is an active (amplified) antenna providing an average of 28.5 dB gain over a passive (non-amplified) antenna.

### Specifications

Frequency: 1575.42 MHz  $\pm$ 10.23 MHz  
Antenna Gain: .75 dBic Typical @ Zenith  
VSWR: 1.2:1 Typical, 1.5:1 Max.  
Filtering: -25.5 dB Typical @  $\pm$ 50 MHz  
Noise Figure: 2.5 dB Max.  
Gain: 26.5 -30.5 dB  
DC Power Req't: 4.5 to 14.4 VDC  
Temperature: -55° C to +70° C

### Installation Instructions

- 1.) The AV-801 antenna must be mounted in a location that will assure the best possible (360° at the horizon) unobstructed view of the GPS satellite constellation in level flight. (i.e. on the top of the aircraft away from projections such as tail surfaces or large antennas). Mounting orientation is not critical and no additional ground plane is required if mounted on a composite airframe. You should also try to locate the antenna in an area that will keep the coaxial cable transmission line as short as possible to the GPS receiver. This will assure maximum signal strength to the GPS receiver.
- 2.) Using the mounting template provided, drill the connector hole & the (4) required holes to mount the antenna.
- 3.) Mount the antenna using the (4) #6-32 Pan Head Machine Screws, the (4) Lock Washers, the (4) Flat Washers, and the (4) Hex Nuts provided. Torque to a maximum of 10 in-lbs.
- 4.) Apply a sealant (RTV is recommended) over the screw heads and around the periphery of the antenna.

