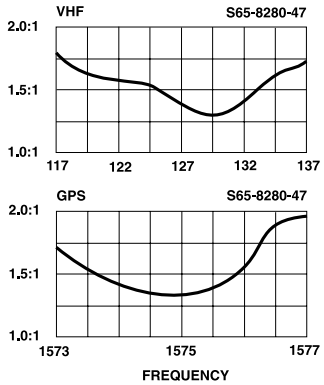
# VHF/GPS S65-8280-47

## DESCRIPTION

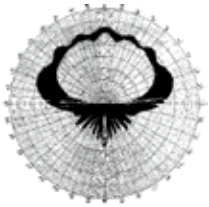
**S65-8280-47:** VHF all-metal blade antenna is top loaded with an ARINC 743 compliant active GPS antenna. Its dual function provides completely TSO'd GPS and VHF communication within the VHF blade footprint. S65-8280-47 is designed to operate with the Magellan CNS-12 digital radio system which functions as both a GPS navigation system and ACARS transceiver. The antenna may be installed on commuter aircraft and helicopters where antenna mounting space is at a premium. Installers will appreciate the simplicity of adding GPS to helicopters, since no major structural rework is required when replacing the VHF comm blade with this antenna.

**FEDERAL & MILITARY SPECS:** FAA-TSO C37d, C38d and C129. DO-160, MIL-E-5400, MIL-A-6271, MIL-A-7772 (ASG), MIL-A-9094.

## PERFORMANCE



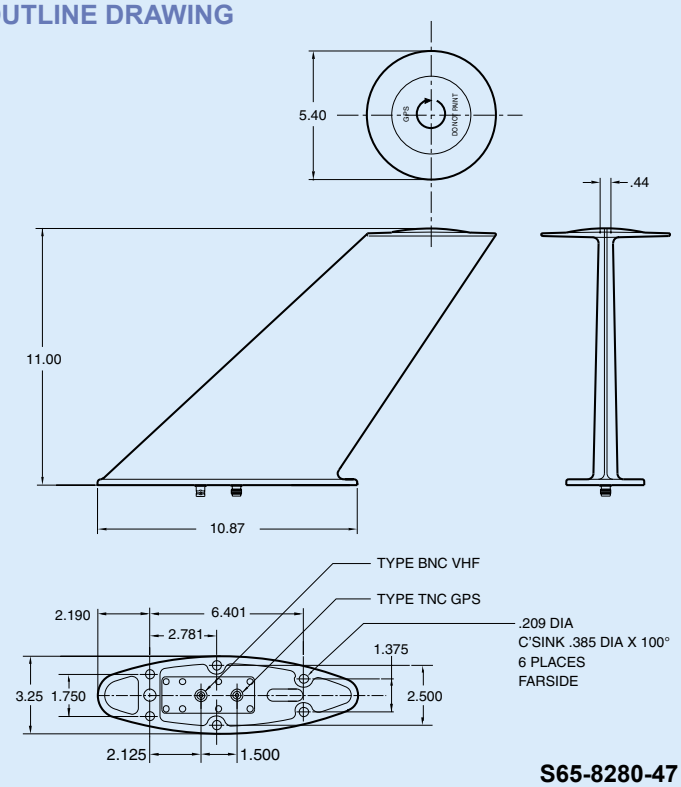

## GPS RADIATION PATTERN



## SPECIFICATIONS

| | VHF / GPS | |
|---|---|---|
| | VHF | GPS |
| | Dual Freq. S65-8280-47 | |
| **ELECTRICAL** | | |
| **Frequency** | 118-152 MHz | 1575.42 MHz |
| **VSWR** | 2.3:1 | 2.0:1 |
| **Pattern** | Omni/Az | |
| | Cos/El | |
| **Polarization** | VERTICAL | RHCP |
| **Impedance** | 50 ohms | 50 ohms |
| **Isolation** | 40 dB | 30 dB |
| **Power Handling** | 25 watts | 1 watt |
| **Lightning Protection** | DC grounded | |
| **Gain Coverage (min)** | | -1.0 dBic 0° ≤ θ ≤ 75° |
| | | -2.5 dBic 75° < θ ≤ 80° |
| | | -4.5 dBic 80° < θ ≤ 85° |
| | | -7.5 dBic θ = 90° |
| | | @ Horizon |
| **Gain (preamp)** | | 26 dB |
| **Voltage** | | +4.0 to +24 VDC |
| **MECHANICAL** | | |
| **Weight** | 3.6 lbs. | |
| **Height** | 11.0 in. | |
| **Material** | A356T61 aluminum / thermoset plastic | |
| **Finish** | Skydrol resistant enamel | |
| **Connector** | BNC | TNC |
| **Drag** | 1.5 lbs. Mach .85 @ 35,000 ft. | |
| **ENVIRONMENTAL** | | |
| **Side Load** | 12 PSI | |
| **Temperature** | -60°F to +185°F | |
| **Vibration** | 14 G's | |
| **Altitude** | 60,000 ft. | |

## OUTLINE DRAWING

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