

CPS S67-1575-14; -76; 86; 96



DESCRIPTION

S67-1575-14: Dual-band L1/L2 passive GPS antenna provides coverage at 1227.6 MHz and 1575.42 MHz with a VSWR of 2.0:1. Spherical radius molded radome provides enhanced protection against rain, ice and lightning strikes. Qualified for high speed military aircraft and dual frequency surveying applications. Qualified per Rockwell Collins specification 013-1922 for use with the MAGR system.

NSN: 5985-01-385-6582

S67-1575-76: Dual-band L1/L2 active GPS antenna provides low-noise coverage at 1227.6 MHz and 1575.42 MHz with a VSWR of 2.0:1. 13 dB gain LNA. Requires +4 to +24 VDC. The amplifier is integrated under the radome. Additional filtering provides significant out-of-band rejection and reduced possibility of saturation by non-GPS signals. DC bias is provided through the coax connector. Spherical-radius molded radome provides enhanced protection against rain, ice and lightning strikes. Qualified for high-speed military aircraft or dualfrequency surveying applications.

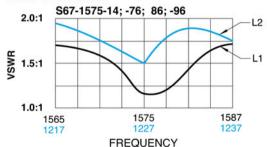
S67-1575-86: Same as (-76) except with a 26.5 dB amplifier.

NSN: 5985-01-458-1780

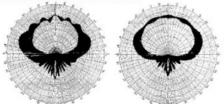
S67-1575-96: Same as (-76) except with a 40.0 dB

FEDERAL & MILITARY SPECS: FAA TSO C129, DO-160, MIL-STD-810, MIL-C-5541, MIL-E-5400.

PERFORMANCE



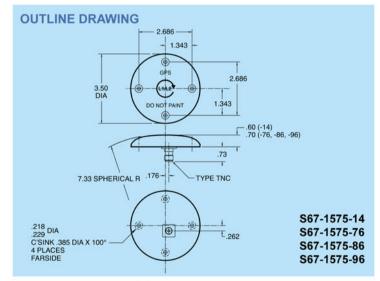
RADIATION PATTERNS



1575 MHz L1

1227 MHz L2

SPECIFICATIONS	GPS			
MODELS S67-1575	-14	-76	-86	-96
ELECTRICAL	,			
Frequency	1565-1585 MHz (L1), 1217-1237 MHz (L2)			
VSWR	2.0:1			
Polarization	RHCP			
Impedance	50 ohms			
Antenna Gain(Typ)	3 dBic @ Zenith			
Gain °Coverage (min)	-1.0 dBic $0^{\circ} \le \theta \le 75^{\circ}$ -2.5 dBic $75^{\circ} < \theta \le 80^{\circ}$ -4.5 dBic $80^{\circ} < \theta \le 85^{\circ}$ -7.5 dBic $\theta = 90^{\circ}$ @ Horizon			
Gain (Preamp)	N/A	13.0 dB	26.5 dB	40.0 dB
Noise Figure	2.8 dB			
Power Handling	1 watt			
Voltage	N/A	+4 to +24 VDC		
Current	N/A	50 mA	60 mA	65 mA
Lightning Protection	DC grounded			
MECHANICAL				
Weight	6 oz.	7 oz.		
Height	.60 in.			
Diameter	3.50 in.			
Material	6061-T6 aluminum / thermoset plastic			
Finish	Skydrol-resistant enamel			
Connector	TNC			
ENVIRONMENTAL				
Temperature	-80°F to +203°F			
Vibration	10 Gs			
Altitude	70,000 ft.			





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