



L1-Band Volute GPS Antennas and Preamplifiers

TYPE - 401225



FEATURES/BENEFITS:

- Low Cost, High Performance
- Hemispherical, Low-Angle Coverage
- -2.0 dBic Minimum Gain, 10 Degrees Above the Horizon
- Available with Various Preamplifier Gain Stages
- Flexible Packaging, installed either in your housing or ours

The TECOM Series L1-Band Volute Antenna and Preamplifier is an attractive aerodynamic package, available with or without an integral 12 or 25 dB preamplifier.

The preamplifier features a noise figure less than 2.0 dB and superior interference rejection. It operates across a wide voltage range, from +4.5 to +24 Vdc, which is supplied via the antenna's coaxial cable and connector. TECOM can silkscreen your company name or logo on the radome to provide a customized antenna.

Electrical Performance Specifications

Frequency Range	VSWR	Gain	Axial Ratio	Temperature Antenna	Temperature Preamplifier
1575.42 ± 10.23 MHz	2.0:1 Max	-2.0 dBic Min. (10° above horizon)	±80° 3.0 dB Max from 0° to 80°	-67° to +185°F -55° to +85°C	-40° to +158°F -40° to +70°C

Common Electrical Performance Data

- 1) Pattern Coverage: Hemispherical
- 2) Impedance: 50 Ohms
- 3) Polarization: RHCP

Available Accessories:

Order Number / Description:

1) 401225-900

Mast mount for marine applications; 1 - 14 UNS-2B pipe thread, reinforced plastic

2) 401225-903

Mast mount; 3/4 - 14NPT pipe thread, reinforced plastic

3) 401225-902

Adapter plate and gasket for mounting to thin structures such as aircraft skin

Innovative Antenna Solutions

Preamplifier Specifications						
Type Number	Voltage via Coaxial Cable	Current Consumption (Max @ +5 Vdc)	Gain (Min)	Noise Figure	-3 dB Bandwidth (Min)	-20 dB Bandwidth (Max)
401225A-212	+4.5 Vdc to +25 Vdc	30 mA	12 dB	<2.0 dB	30 MHz	100 MHz
401225A-225	+4.5 Vdc to +25 Vdc	45 mA	25 dB	<2.0 dB	30 MHz	100 MHz

Ordering Information:

401225A - * **

Specify Preamplifier Voltage as Follows:

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0 - Without Preamplifier

2 - +4.5 Vdc to +24 Vdc

Specify Preamplifier Gain as Follows:

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00 - Without Preamplifier

12 - 12 dB Gain Integral Preamplifier

25 - 25 dB Gain Integral Preamplifier

Preamplifier Output Connector:

Standard: TNC female standard.

TNC to SMA, Female and TNC to Type N Female adapters available as extra cost options.