Precision Performance WAAS Antenna

Specifically designed to meet the demanding standards necessary for worldwide WAAS aviation operations, model 2225NW features both advanced spiral technology and a self-complementary element structure.

The antenna's low multipath error design has the lowest phase error of all antenna element designs. The spiral minimizes manufacturing errors and its self-complementary currents act to center antenna phase. The large cavity design (1/5 lambda) allows for similar, choke slot-like (radiation pattern), roll off at the horizon and a superior front-to-back ratio.

2225NW

STANDARD CONFIGURATION

Model	Connector	Mount	Radome
2225NW	RF Side: N Female, flange-mount DC Side: N Male, cable-terminated	Interface to PELCO mount (mount not included)	Color: White

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Range	LNA Gain	Element Gain	Polarization	Current Draw	DC Voltage
1575.42 MHz (L1 band) 1227.60 MHz (L2 band) 1176.45 MHz (L5 band)	48 ± 3 dB	> -3 dBic @ El=90° (zenith) ≥ -9.0 dBic @ El=5° (L1) > -3 dBic @ El=90° (zenith) ≥ -5.0 dBic @ El=5° (L2) > -3 dBic @ El=90° (zenith) ≥ -9.0 dBic @ El=5° (L5)	Right hand circular	≤ 200 mA @ 24 V	24 V

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued

VSWR	Elevation Boresight	Noise Figure	1 dB Compression	Axial Ratio	Bandwidth:
< 1.5:1 ± 10 MHz < 2.0:1 @ ± 10 MHz (all bands)	90° above horizon	2.0 dB	≥ 10 dBm	8 dB (max) elevation from 5°- 45° 4 dB (max) elevation above 45°	-1 dB +/-10 MHz (L1, L2, L5) -80 dB +/-50 MHz (L1, L2, L5)

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued

Bandpass Ripple	Group Delay Ripple:	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Nominal Impedance
1.5 dB +/-10 MHz (L1, L2, L5)	3 ns @ L1 +/-10 MHz 4 ns @ L2 +/-10 MHz 4 ns @ L5 +/-10 MHz	Omnidirectional	66° (L1 band) 90° (L2 band) 103° (L5 band)	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS - GNSS ANTENNA

Dimensions	Weight	Temperature Range	Wind Operational
24.5" H x 12.8" OD (61.27 x 32.5 cm)	30 lbs (13.6 kg)	-58°F to 158°F	0-100 mph