



# EA45

## GNSS Antenna

- Multi-mode dual-band GNSS antenna
- Millimeter phase center error
- Compact design
- RoHS compliant

The EA45 GNSS antenna has been designed to support millimeter accuracy for land and marine applications. The EA45 GNSS antenna supports present and future GNSS signals, including GPS, GLONASS, BeiDou and Galileo. The EA45 is a survey grade, multi-GNSS precision antenna, ideal for a variety of applications including surveying, RTK positioning and navigation, precision guidance, and machine control. The EA45 antenna can be used in challenging environments (such as near buildings or foliage), as it has superior multipath mitigation, stable phase center and strong SNR's even at low elevations. The EA45 aluminum base has been pretreated for a Marine environment and will withstand salt fog and spray. The housing is designed to withstand 2 meter pole drop tests for the antennas.

# Product Specification

GNSS Performance		Environment	
Satellite Tracked	GPS L1/L2/L5, GLONASS G1/G2/G3, BeiDouB1/B2/B3, SBAS, L-band DGNSS/HP/XP(OmniSTAR), Galileo E1/E5a/E5b	Operating Temperature	-30 °C to + 70 °C
GNSS Frequency	1.165 to 1.278 GHz 1.525 to 1.615 GHz	Storage Temperature	-40 °C to +85 °C
Polarization	Right Hand Circular	Humidity	95% non-condensing
Axial Ratio	2 dB Max @ Axis	Water/Dust Proof	IP69K
LNA Gain	30 dB, typical	Mechanical Shock	EP455 Section 5.14.1
LNA Noise Figure	2 dB, typical	Corrosion Resistant	IEC60945 Section 8.12 Corrosion
Out-of-Band Rejection	1570±200 MHz >40dBc 1224±200 MHz >50dBc	Vibration	EP455 Section 5.15.1 Random
<b>Phase Center Variation</b>		EMC	CE (IEC 60945 Emissions and Immunity) FCC Part15 Subpart B CISPR22
Less than 2 mm at GPS L1 and L2, for elevations above 15 degrees			
<b>Power Input</b>			
Voltage	3.3 V DC to 15 V DC		
Input Current	25 mA, typical		
<b>Physical</b>			
Enclosure	Aluminum base with ASA plastic cap		
Dimensions	47.3 H x 153.5 D (mm)		
Weight	520g		
Mount	5/8 inch female thread		
RF Connector	TNC (straight)		

