

UniStrong

UA45 GNSS Antenna

Key Features

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



The UA45 GNSS antenna has been designed to support millimeter accuracy for land and marine applications. The UA45 GNSS antenna supports present and future GNSS signals, including GPS, GLONASS, BeiDou and Galileo.

The UA45 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 UA45 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 UA45 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.

Multi-GNSS Performance

GNSS Reception:	GPS L1/L2/L5, GLONASS G1/G2/G3, BeiDouB1/B2/B3, SBAS, L-band DGNSS/HP/XP(OmniSTAR), Galileo E1/E5a and b
GNSS Frequency:	1.165 to 1.278 GHz 1.525 to 1.615 GHz
Polarization:	Right Hand Circular
Axial Ratio:	2 dB Max @ Axis
LNA Gain:	30 dB , typical
LNA Noise Figure:	2 dB, typical
Out-of-Band Rejection:	1570±200 MHz > 40dBc 1224±200 MHz > 50dBc

Phase Center Variation

Less than 2 mm at GPS L1 and L2, for elevations above 15 degrees

Power Input

Voltage: 3.3 V DC to 15 V DC
Input Current: 25 mA, typical

Mechanical

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)

Environmental

Operating Temperature: -30°C to +70 °C
Storage Temperature: -40°C to +85°C
Humidity: 95% non-condensing
Enclosure Rating: IP69K
Mechanical Shock: EP455 Section 5.14.1
Corrosion resistant: IEC60945 Section 8.12 Corrosion
Vibration: EP455 Section 5.15.1 Random
EMC: CE (IEC 60945 Emissions and Immunity) FCC Part15, Subpart B CISPR22

