

# MULTI-FREQUENCY, MULTI-GNSS ANTENNA



The A45 GNSS antenna is designed to support millimeter-level accuracy on land and marine applications. The A45 GNSS antenna offers support for present and future GNSS signals, including GPS, GLONASS, BeiDou, and Galileo. A45 is a multi-GNSS precision antenna and is ideal for various applications including surveys, RTK positioning and navigation, precise guidance, and machine control. Use the A45 antenna in challenging environments (such as near buildings and foliage) for superior multipath mitigation, stable phase center, and strong SNR's, even at low elevations. The ruggedized housing is made of an aluminum base that has been pretreated for the marine environment and will withstand salt, fog, and spray. The antenna easily passes the two-meter pole drop test.

#### GNSS Sensor

**Signals Received:** GPS L1/L2/L5, GLONASS G1/G2, BeiDou B1/B2/B3, SBAS, L-band, and Galileo E1/E5a and b

**GNSS Frequency:** 1.165 to 1.278 GHz  
 1.525 to 1.615 GHz

**LNA Gain:** 30 dBn  
**LNA Noise:** 2.0 dB, typical

#### L-Band Sensor

**L-Band Frequency:** 1.525 - 1.585 GHz operation  
**L-Band LNA Gain:** 30 dB

#### Power

**Input Voltage:** 3.3 to 15 VDC  
**Input Current:** 25 mA, typical

#### Mechanical

**Enclosure:** Aluminum base with Lexan™ plastic cap  
**Dimensions:** 4.7 H x 15.2 D (cm)  
 1.8 H x 6.0 D (in)

**Weight:** .50 kg (1.1 lbs)  
**Mount:** 5/8 inch female thread  
**RF Connector:** TNC (straight)

#### Environmental

**Storage Temperature:** -40° C to +85° C (-40°F to +185°F)

**Operating Temperature:** -40° C to +70° C (-40°F to +158°F)

**Enclosure Rating:** IP69K

**Shock/Vibration:** EP455

**Phase Center Variation:** Less than 2 mm at GPS L1, for elevations above 15 degrees