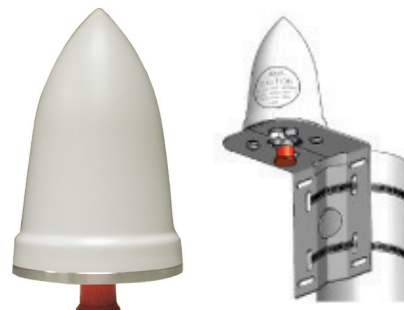


Timing Reference Antenna **ANT GNSS 2**

The **ANT GNSS 2** timing reference antenna is specifically designed for long-lasting, trouble-free deployments in congested cell-site applications. The low noise, high gain amplifier is well suited to address attenuation issues associated with applications requiring longer cable runs.

The quadrifilar helix design, coupled with multi-stage filtering provides superior out-of-band rejection and lower elevation pattern performance than traditional patch antennas. This multi-band antenna covers GPS L1, GALILEO L1 as well as GLONASS E1 frequencies.

The unique radome shape sheds water and ice, while eliminating problems associated with bird perching. The antenna comes with surge compliant mounting that addresses industry grounding requirements. This antenna is made of materials that fully comply with provisions stipulated by EU directives RoHS 2002/95/EC. The antenna provides integrated, on-board lightning protection capability that alleviates the need for downstream, in-line surge suppressors. The antenna also features ESD, reverse polarity protection and transit voltage suppression.



FEATURES

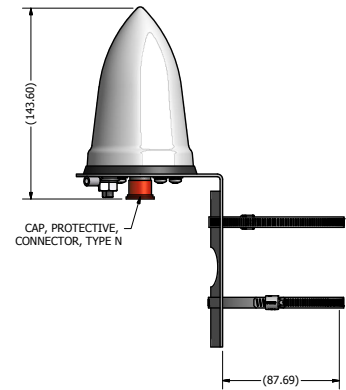
- Powerful attenuation mitigation – Via low noise, high gain amplifier
- Superior filtering – Quadrifilar helix design with multi-stage filtering provides effective out-of-band rejection and lower elevation pattern performance
- Multiband coverage – spans GPS L1, GALILEO L1 and GLONASS E1
- Ends need for downstream, in-line surge suppressors – through Integrated, on-board lightning protection
- Supplied with surge compliant mounting

ELECTRICAL SPECIFICATIONS

Frequency Range	1590 ± 30 MHz
LNA Gain	40 dB ± 4 dB @ GPS L1 & GALILEO E1
	38 dB ± 4 dB @ GLONASS L1
Element Gain	≥ 3 dBic
Polarization	Right hand circular
Out of Band Rejection	≥ -60 dB @ f ≤ 1530 MHz
	≥ -60 dB @ f ≥ 1660 MHz
Noise Figure	< 2.5 dB @ +25°C including pre-selector (maximum)
Current Draw	< 40 mA
DC Voltage	2.8-9.0 V (operating)
	≤ 28.0 V (survivability)
VSWR	2.0:1 (typical)
Nominal Impedance	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

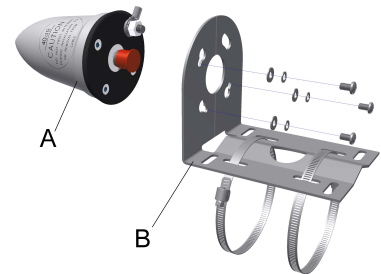
Dimensions	7.25" H x 3.20" D (184 x 81 mm)
Weight	0.75 lbs (0.34 kg)
Housing Material	ASA
Lightning Protection	Per EN61000-4-5 Level 4
Temperature Range	-40°C to +85°C
Humidity	95%
Connector	N Female (one - bottom fed)
Mount	Fits pipes of 1"-1.45" (25-37 mm) maximum diameter. Medium duty mount, grounding screw, and lug nut included.



INSTALLATION INSTRUCTIONS

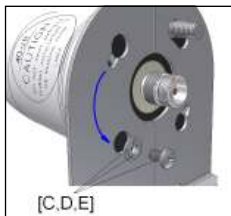
ANTENNA KIT DESCRIPTION:

The **ANT GNSS 2** is a self-contained GPS antenna and mount kit. The kit includes a right hand circularly polarized antenna that incorporates a high performance, low noise amplifier (A). It also includes a medium duty L mount bracket to attach the antenna to a vertical and horizontal pipe within a range of diameters detailed below (B).



INSTALLATION:

Note – installation of antenna requires an unobstructed clear view to the sky.



The L mount Bracket Kit attaches the GPS antenna on vertical or horizontal pipes and beams with a diameter ranging from 2 1/2 - 8 1/2 in [60mm-215mm] diameter.

Antenna/Mount Assy – remove protective cap and grounding hardware from antenna. Align Water Shed Gasket to mounting holes and orient antenna onto bracket – Gasket may distort prior to installation. Install screw hardware [C, D, E] opposite ground stud. Rotate into place and tighten - Recommended torque 5- 8lbf*in [1Nm].



Repeat for remaining screws x2. Assemble (AWG-6/16mm^2 min) Grounding cable to crimp lug [J] fasten with supplied hardware [F, G, H]. Do not over tighten - Recommended torque 5-8lbf*in [1Nm].

MOUNT TO MAST ASSY: Position antenna onto Mounting structure. Route hose clamps and tighten x2.

Attach the other end of grounding cable to shortest possible ground connection. Attach coax cable, and Install weatherproofing (not provided with the Mount Kit) extending at least 2" below the bottom of the connector to directly underneath the base plate of the antenna.

