

Timing 3000 Antenna



General Description:

The Timing 3000 is a 100% form, fit, function replacement for the original Motorola Timing2000 GPS Antenna.

- Dual Pole Filter 40dB minimum at +/- 50MHz
- Rugged N Style Coaxial Connector plus TNC adaptor
- Mounts with standard Right Angle Bracket or optional Pipe Adaptor
- Designed for fixed mount Precision Timing and Network Synchronization
- 25 dB Gain Typical

General Characteristics:

Parameter	Value
Operating Frequency:	1575.42 MHz, +/- 2 MHz
Input Impedances:	50 Ohm
VSWR:	1.5 (typical)
Bandwidth:	25 MHz (typical) +/- 3dB points
Polarization:	Right Hand Circular
Azimuth Coverage:	360°
Elevation Coverage:	0° to 90°
Gain Characteristics of Antenna Element:	+2.0 dBic minimum at zenith -10 dBic minimum at 0° elevation
Filtering:	40dB minimum @ +/-50 MHz
LNA Gain:	25dB (typical)
Noise Figure:	1.5dB (typical)
Dynamics:	Vibration: SAE J1455

Electrical Characteristics:

Parameter	Value
Power Requirements:	5 +/- 0.25 Vdc
Power Consumption:	26mA @ 5 Vdc (typical)

Physical Characteristics:

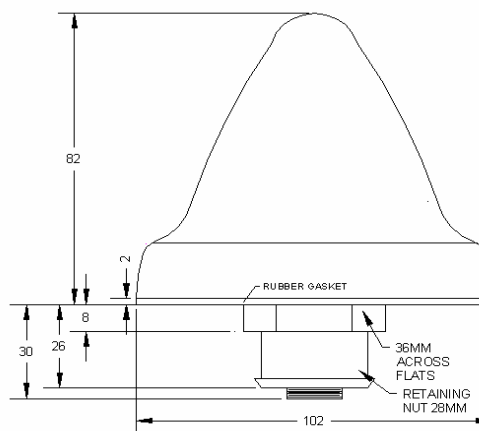
Parameter	Value
Dimensions:	102 diameter x 82 height (mm)
Weight:	312 grams
Mount:	Center mount (M28 nut)
Connector:	N-Connector plus TNC adaptor

Environmental Specifications:

Parameter	Value
Operating Temperature Range:	-40° C to +85° C
Storage Temperature Range:	-40° C to +100° C
Humidity:	95% noncondensing
UV Radiation:	JIS D0202 (Sunshine Carbon Arc System)
Salt Spray Test:	Spray 5% NaCl solvent at 35°C
Immersion Test:	1 meter (with connector sealed)
Transient Voltage Test:	+/- 12 kV

Note: All performance measurements are typical and referenced to 25°C unless indicated otherwise.

Dimensional Drawing:



Ordering Information:

Part Number	Configuration
T3000N	with N connector, TNC(F)to N(M) adaptor, and Right angle mount bracket

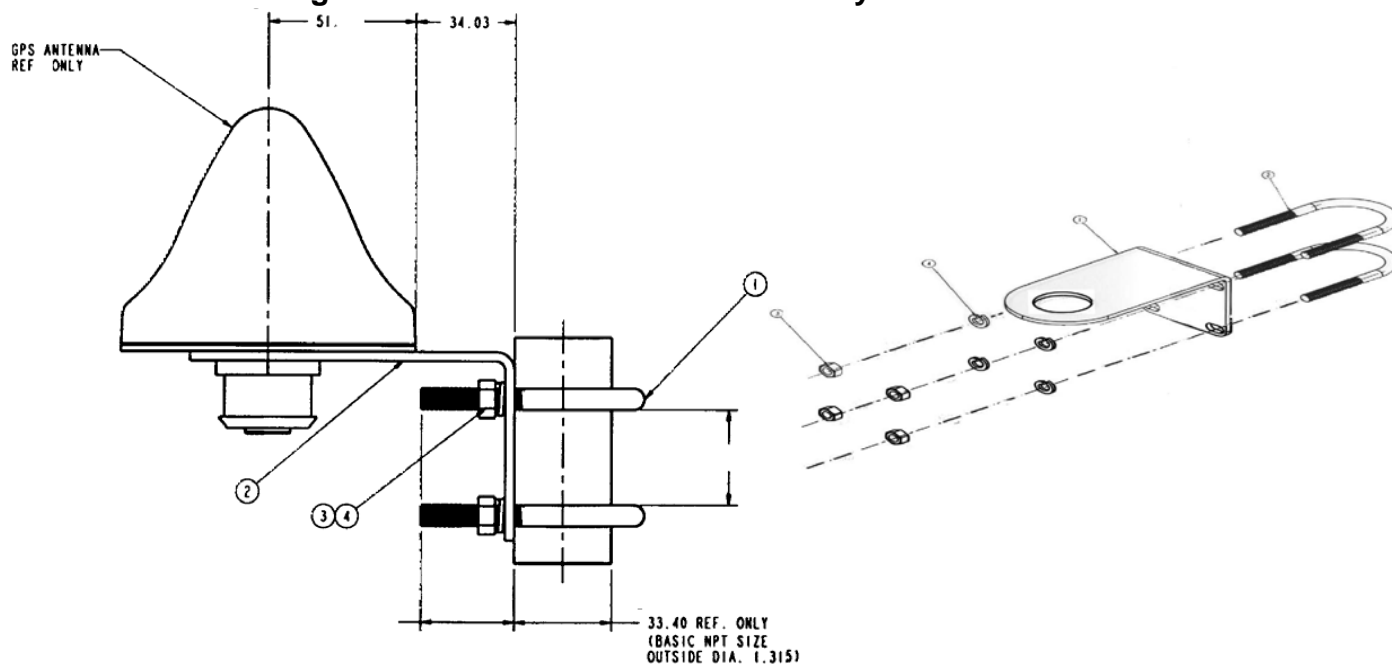
Accessories:

Part Number	Configuration
AMNT2	Converts M28x1 to 1.0 inch I.D. with setscrew

For configuration assistance, order placement and technical support call:

	<p>CNS Systems, Inc. Communication, Navigation and Surveillance</p>	<p>Phone: (410) 987-7835 · Fax (410) 987-7836 Email: info@cnsys.com · www.cnsys.com</p>
--	--	---

Timing 3000 Antenna and Mount Assembly: Installation Notes



Installation Notes:

- Antenna Nut Torque: 87 in-lb. or 100 kgf-cm.
- For best performance use LMR240 coax cable with TNC-connectors up to 200 feet or LMR400 coax cable with N-connectors over 200 feet. See <http://www.cnssys.com/cnsclock/Ordering.html> for cable choices.
- Use N-connector or TNC connector, as appropriate for your coax cable.
- Weatherproof mating connectors are required to ensure water resistant seal. Use Coax-Seal or equivalent (see www.coaxseal.com).
- For optimal performance ensure base of antenna is position as close as possible to the top of the mounting pole.
- Select a mounting location with a clear view (360 deg.) of the sky. It is not necessary to place the antenna higher than needed to get a clear view of the sky.
- Use extreme caution when mounting near high voltage power lines.

For configuration assistance, order placement and technical support call:



CNS Systems, Inc.
Communication, Navigation and Surveillance

Phone: (410) 987-7835 • Fax (410) 987-7836
Email: info@cnssys.com • www.cnssys.com