#### WARRANTY POLICY

NovAtel Inc. warrants that its Global Positioning System (GPS) products are free from defects in materials and workmanship, subject to the conditions set forth below, for the following periods of time:

Choke Ring Ninety (90) Days Cables and Accessories Ninety (90) Days

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There are no user-serviceable parts in this accessory, and no maintenance is required.

You must obtain a RETURN MATERIAL AUTHORIZATION (RMA) number by calling GPS Customer Service at 1-800-NOVATEL (Canada and USA only) or 403-295-4900 before shipping any product to NovAtel or your local dealer.

Once you have obtained an RMA number, you will be advised of proper shipping procedures to return any defective product. When returning any product to NovAtel, please return the defective product in the original packaging to avoid ESD and shipping damage.

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http://www.novatel.ca







# NovAtel GPSAntenna<sup>TM</sup> Accessory Choke Ring Model A032

- User Information -



#### **DESCRIPTION**

The NovAtel Choke Ring Model A032 has been designed to provide a light-weight, low-cost solution for the problem of GPS signal multipath reflections. It enables the NovAtel GPSAntennas to achieve geodetic-quality GPS measurements for surveying, mapping and research applications.

A choke ring's unique construction substantially reduces the multipath effect on the GPS signal. The choke ring actually reduces the antenna gain at low elevation, where the multipath is more prone to affect system accuracy. By reducing measurement errors due to multipath, the result is greater accuracy in your positioning calculations.

The Model A032 choke ring is intended for use with NovAtel GPSAntenna Models 502, HMT20004, 531, and HMT20002. It will mount on a standard surveying tripod (with 5/8" mounting bolt), or other equivalent mounting structure.

### **GPS Choke Ring Model A032**

## **Specifications**

Material: Aluminum casting alloy with powder coated

polyurethane finish

Diameter: 36.92 cm (14.4 inches)

Height of choke ring: 6.15 cm (2.4 inches)

Weight: 1.8 kg (4.4 lbs.)

Mounting: 5/8 - 11 UNC thread

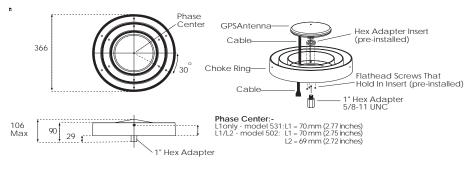
Usable temperature range:  $-55^{\circ}\text{C to } +70^{\circ}\text{C } (-67^{\circ}\text{F to } 158^{\circ}\text{F})$ 

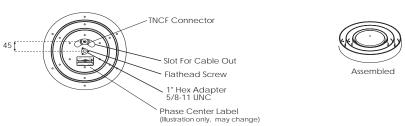
Phase Center (L1 only – model 531): 70 mm (2.77 inches))

Phase Center (L1/L2 – model 502): L1 = 70 mm (2.75 inches)

L2 = 69 mm (2.72 inches)

## **Mechanical Drawings**





Note: All dimensions in millimetres except for thread size.

### Installation

The procedure for setting up your NovAtel GPSAntenna Choke Ring is as follows:

- 1. From the bottom of the choke ring, feed the TNC connector end of the antenna cable through the curved cable feed opening (next to the center mounting hole).
- 2. Connect the TNC cable connector to the GPSAntenna and tighten.
- 3. Seat the GPSAntenna onto the pre-installed hex adapter insert, over the center mounting hole. Orient it so that the cable easily passes through the cable feed opening (see *Figure 1*).
- 4. Insert the threaded end of the adapter through the mounting hole, from the bottom (see *Figure 2*), into the hex insert and then the base of the antenna. Turn clockwise until finger tight.
- 5. Now that the choke ring is attached to the adapter, screw the bottom of the adapter onto a tripod, tribrach adapter or other equivalent mount (see *Figure 3*).
- Pull any excess cable through the cable feed opening and connect it to your receiver.
- 7. Your GPSAntenna will have a logo and an arrow on its top surface. Align this arrow with north.



Figure 1: Seating the Antenna



Figure 2: Inserting the Adapter End



Figure 3: Mounted on a Tripod