

# PolaNt Choke Ring B3/E6

High precision geodetic choke ring antenna



Septentrio's PolaNt Choke Ring B3/E6 is a high precision geodetic multi-frequency multi-constellation choke ring antenna for use with Septentrio's PolARx family of high performance multiple-frequency GNSS reference receivers. It supports current and planned GNSS signals including BeiDou B3 and Galileo E6.

Our PolaNt Choke Ring antenna incorporates low-noise amplifiers, powerful filters for out-of-band interference rejection combined with Superior multipath rejection and a high phase centre stability.

It is a competitive alternative for Dorne & Margolin based antennas and is designed for high-end applications and reference station operations. The sealed radome allows reliable signal reception even in difficult conditions

## Key Features

- ▶ **Support current and planned GNSS signals from GPS, GLONASS, Galileo, BeiDou, IRNSS, QZSS and SBAS**
- ▶ **BeiDou B3 and Galileo E6 are supported**
- ▶ **High phase center stability**
- ▶ **IGS calibration available**

# PolaNt Choke Ring B3/E6

## PERFORMANCE

### GNSS Frequencies

L-Band	
GPS	L1, L2, L5
GLONASS	L1, L2, L3
Galileo	E1, E5ab, E6
BeiDou	B1, B2, B3
IRNSS	L5

### Polarization

RHCP

### Axial Ratio

3 dB max

### Radiation Coverage

$\theta = 0^\circ$	6.0 dBic
$0^\circ < \theta < 75^\circ$	-2.0 dBic
$75^\circ \leq \theta < 80^\circ$	-3.0 dBic
$80^\circ \leq \theta < 85^\circ$	-4.0 dBic
$\theta = 90^\circ$	-5.0 dBic

### Amplifier

Gain	$39 \pm 2$ dB
Noise Figure	2.6 dB max
Input Voltage	+4.2 to +15 VDC
Current	65 mA (typ)
Power handling	1 W
Impedance	$50 \Omega$
VSWR	$\leq 2.0:1$

## PHYSICAL AND ENVIRONMENTAL

**Finish** UV Resistant Polyurethane Enamel (white)

**Weight** 4.98 kg (11 lb)

**Diameter** 376 mm (14.8 in)

**Connector** N-Type Female

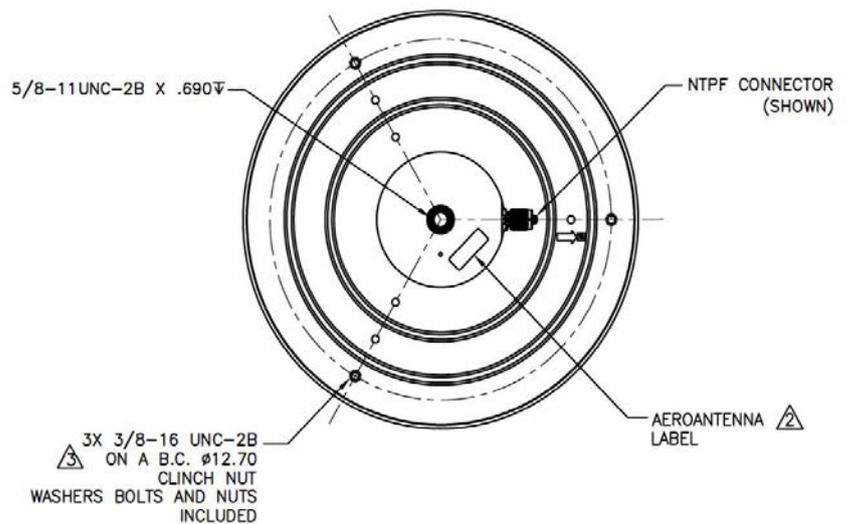
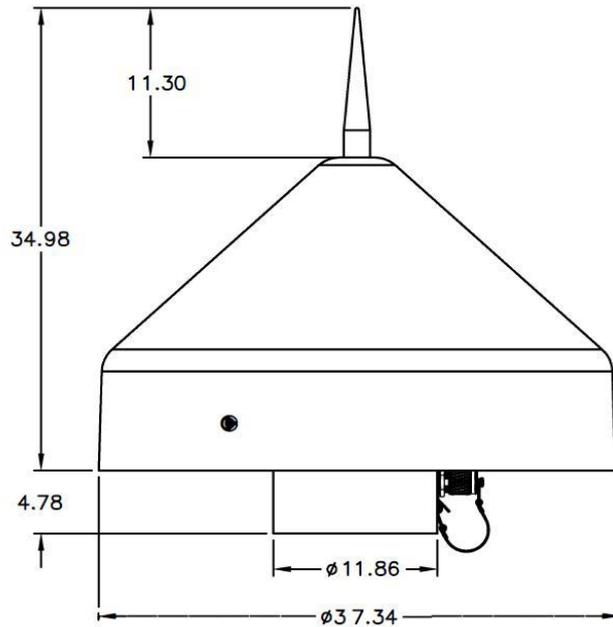
**Operating Temperature** -55 °C to +85 °C  
(-67 °C to +185 °F)

**Designed to** DO-160C

**IGS Reference** SEPCHOKE\_B3E6

## DIMENSIONS

Dimensions in centimeters (cm)



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