Ashtech Choke Ring Antenna

- Billet Aluminum Choke Ring Antenna with Dome & Margolin Element
- Hemispherical Radome





ASHTECH LNA AND DORNE & MARGOLIN ELEMENT

Overview

The Ashtech Choke Ring antenna is machined from a single billet of 6061-T6 aluminum. This choke ring antenna retains the original IGS design. The choke ring includes a Dorne & Margolin C146-10 vertical dipole element. The Ashtech choke ring antenna provides proven technology and reliability and is the standard for high-end reference applications.

PROVEN DESIGN

The Ashtech choke ring is a proven design and is used in dozens of high-end networks around the world. These networks include the Southern California Integrated GPS Network (S.C.I.G.N.), the Ordnance Survey in the United Kingdom and the Chinese State Seismological Bureau (CSSB). The antenna consists of a ground plate with five concentric ring structures, a Dorne & Margolin C146-10 dipole element and a proprietary low-noise amplifier (LNA). The choke ring design reduces ground-based multipath thereby improving the quality of the GPS observables. The Ashtech choke ring antenna is machined from a single billet of aluminum.

ASHTECH LNA AND DORNE & MARGOLIN ELEMENT

The Ashtech proprietary low-noise amplifier (LNA) exhibits low-noise performance. It operates over a 5 to 15 volt DC antenna supply, and includes RF filtering for excellent out-of-band interference rejection.

GPS INDUSTRY LEADER

Ashtech Reference Station products continue to raise the industry standard for high-precision continuous operation. The Ashtech choke ring antenna combines the field tested IGS design with advanced GPS choke ring technology at an affordable price.

Thales Navigation

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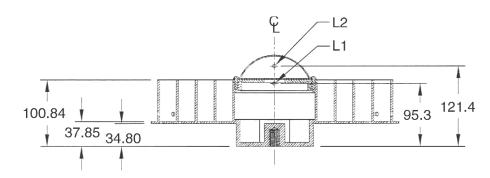


Ashtech Choke Ring Antenna Specifications

Standard Features

Billet Forged Choke Ring Antenna

- Billet aluminum construction, machined from a single piece of 6061-T6 aluminum
- · Accepted IGS design
- · Dorne & Margolin C146-10 element
- Conductive gaskets for antenna stability in humid conditions
- North marker for back-sighting
- Gold alodine anti-oxidation coating
- Proprietary Ashtech low-noise amplifier (LNA),
 5 to 15 volt operation



The Ashtech Choke Ring is IGS compliant and provides superior multipath rejection. (Dimensions are in millimeters).

Choke ring Antenna Specifications

Temperature

-Operating -55°C to $+65^{\circ}\text{C}$ -Storage -55°C to $+75^{\circ}\text{C}$

Humidity 100%

Frequency L1 1575.42 ± 10.23 Mhz

L1 1227.60 \pm 10.23 Mhz

Polarization RHCP

Antenna Gain +5dBiC @ ZENITH

-4dBiC @ 5° ELEVATION

 DC Power
 5–15V, 45mA TYP

 LNA Gain L1
 38dB ± 3dB

 LNA Gain L2
 39dB ± 3dB

 Output
 50 OHM, TYPE N

 Weight
 4.7 kg (10.5 lbs)

