



## GOES TGA-100

S1281

- **Rugged**
  - **360° Azimuth coverage**
  - **90° Elevation coverage**
- **Easy installation, adjustment & maintenance**

The GOES antenna is specifically designed to operate with the ZENO® / GOES data collection platform. The design goals achieve a higher gain, narrower band width and optimization of frequency for the end user. The gain of TGA-100 was maximized at 11.0 dBd at the design frequency of 402 MHz, which provides a narrow band width (394 - 410 MHz @ 1.5:1 VSWR) with side lobes of  $\geq -15$  dB. Combined with these design features are connectors and cabling to protect signal integrity. A female Type N, 50 ohm bulkhead connector and a 50 ohm coax cable will ensure the needed connection. The cable can be

any length, but must have a Type N male connector on one end and a BNC male connector on the other.

The GOES TGA-100 is designed to withstand rugged environments with its construction of solid aluminum rods and thick walled aluminum tubing. Stainless steel or corrosion resistant aluminum is incorporated wherever possible, allowing for extended exposure in harsh climates. Physical features and high component standards ensure users of optimal longevity and performance.



## Technical Specifications

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### Electrical

Gain:	11.0 dBd
Frequency:	402 MHz
Bandwidth:	394 - 410 MHz (1.5:1 VSWR) 7 element linear polarization
3 dB Beam Width:	Horizontal: $\leq 45^\circ$ Vertical: $\leq 40^\circ$
First Side Lobe:	$\geq -15$ dB
Normal Impedance:	50 $^\circ$
Connector:	Type N female bulkhead

### PHYSICAL

Length:	48 inches (122 cm)
Width:	15 inches (38.1 cm)
Antenna Weight:	3.25 lb (1.47 kg)
Bracket Weight:	1.5 lb (68 kg)
Antenna & Elements:	Light weight aluminum
Elements:	Welded to antenna beam
Azimuth/Elevation Bracket:	Light weight aluminum
Bracket Hardware:	All pieces corrosion resistant stainless steel
U-bolts:	Will accommodate a mast of 2.125" (53.975 cu) maximum O.D.