



High gain sector antennas provide superior pattern and gain performance in an efficient size and weight. Available azimuth sizes include 45°, 60°, 90°, and 180° in either horizontal or vertical polarization.

### Product Features

- High gain performance - 21 dBi @ 90°
- Extensive null fill for uniform coverage
- Equivalent pattern performance in both horizontal and vertical polarizations
- Broadband performance 26.35 - 31.3 GHz
- Low VSWR across frequency band
- Excellent intermodulation (IM) performance
- Side-entry waveguide for easy integration
- Optional mount available with elevation vernier for downtilt adjustment of up to ±5°



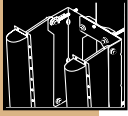
Broadband Antenna Products

### Electrical Specifications

Polarization (specify at time of order)	Horizontal or Vertical
Polarization discrimination, dB	>24
Input power rating, watts	50
VSWR max. (R.L., dB)	1.5 (14)
Input connector	Waveguide cover flange See Antenna Gain table.

### Mechanical Specifications

Survival wind velocity, mph (km/h)	125 (200)
Operating temperature °F (°C)	-40 to +140 (-40 to +60)
Size, approx. H x W x D, in (mm)	See outline drawings
Color	Gray per PMS420
Weight, lb (kg)	7.4 (3.4)

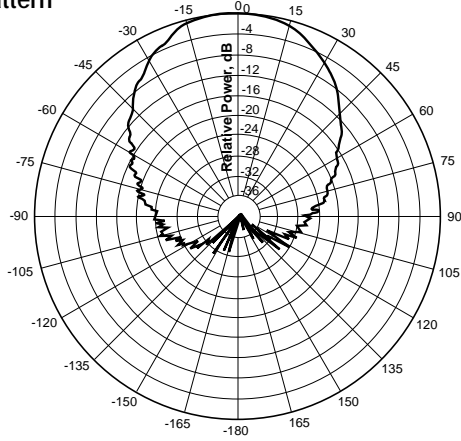


# BCA High Gain Sector Antenna

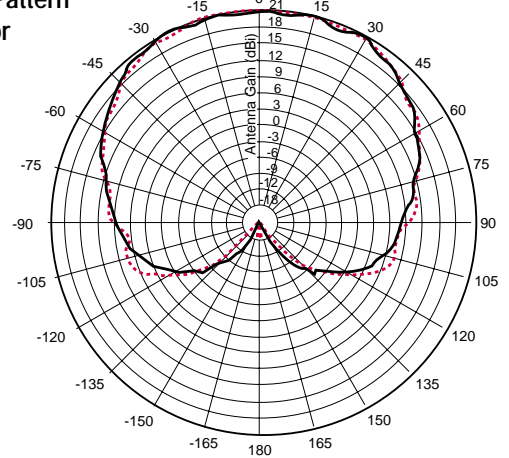
## Typical Patterns

Broadband Antenna Products

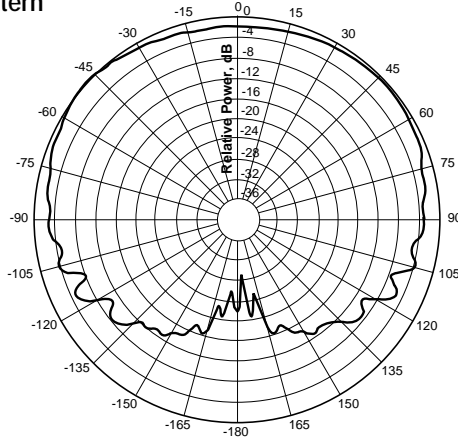
**Azimuth Pattern  
45° Sector**



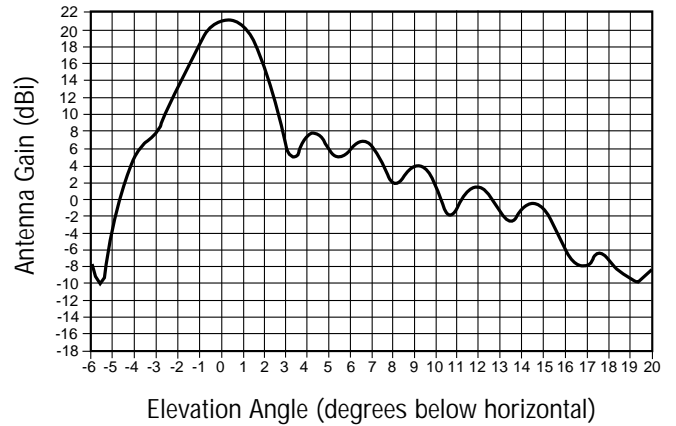
**Azimuth Pattern  
90° Sector**



**Azimuth Pattern  
180° Sector**



**Elevation Pattern**



### Antenna Gain

Antenna Type Number	Frequency Band, GHz	Sector Size Degrees (HPBW)	Gain, dBi, Nominal	Waveguide Type
BCAH045-285(*)-(**)	26.35 - 31.3	45	23.8	WR28
BCAH060-285(*)-(**)	27.5 - 30.0	60	22.5	WR28
BCAH090-285(*)-(**)	26.35 - 31.3	90	21	WR28
BCAH180-275(*)-(**)	26.35 - 28.5	180	18	WR28
BCAH180-300(*)-(**)	28.25 - 31.3	180	18	WR28
BCAH090-250(*)-(**)	24.25 - 26.5	90	20.5	WR42

\* Specify H for horizontal polarization or V for vertical polarization

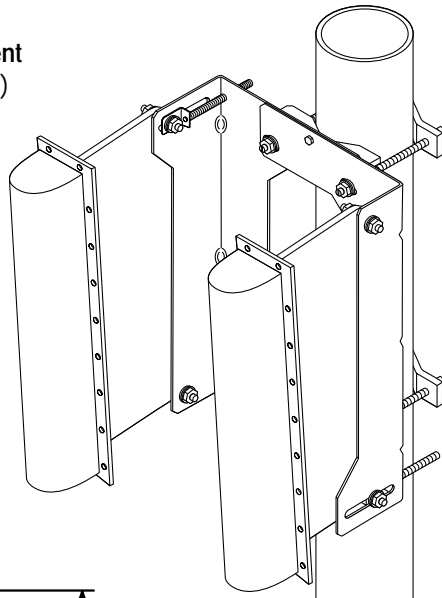
\*\* Specify Ø - for no mount. S - for single antenna mount (shown in picture on page 705) D - for dual antenna mount

# BCA High Gain Sector Antenna

## Mount and Outline Dimensions



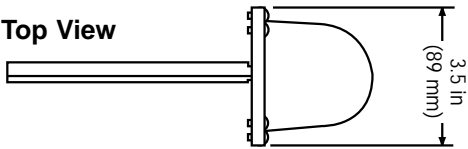
**Typical Mounting Arrangement**  
(Dual Antenna Configuration)



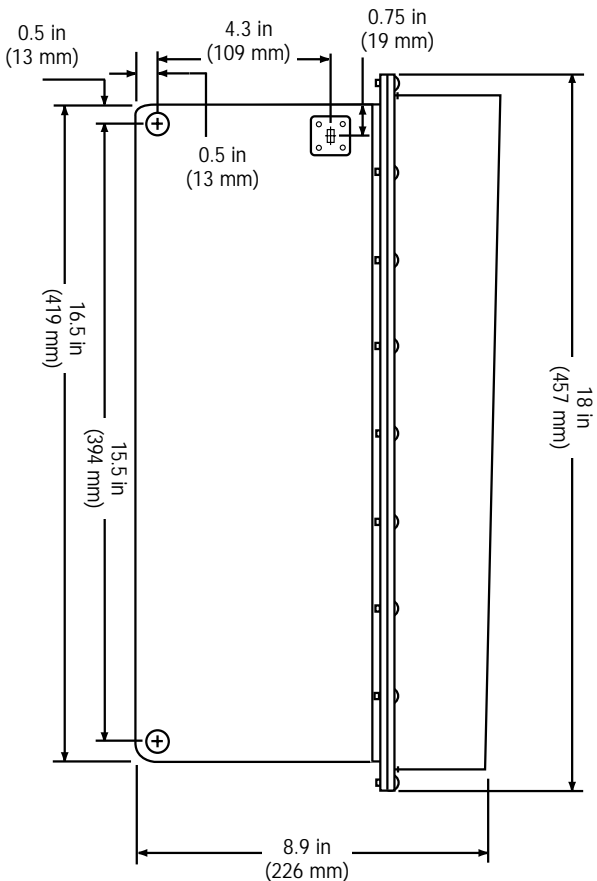
Antenna mounts to support pipe sizes from 2.375" (60 mm) to 4.5" (114 mm) diameter.

**45° and 90° Sector Antennas**

**Top View**

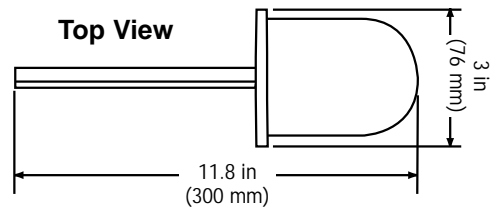


**Side View**



**180° Sector Antenna**

**Top View**



**Side View**

