

# BCA Series

## Ultra High Gain Sector Antenna for Broadband Wireless Systems

**Frequency: 26.35-31.3 GHz**

Andrew Broadband Communications Antennas (BCA) offer an ideal solution to the complex and difficult problem of providing optimum, cost effective coverage for broadband communications. Covering the 26.35-31.3 GHz frequency bands, this ultra high gain sector antenna delivers 24 dBi Gain performance at 90° azimuth coverage.

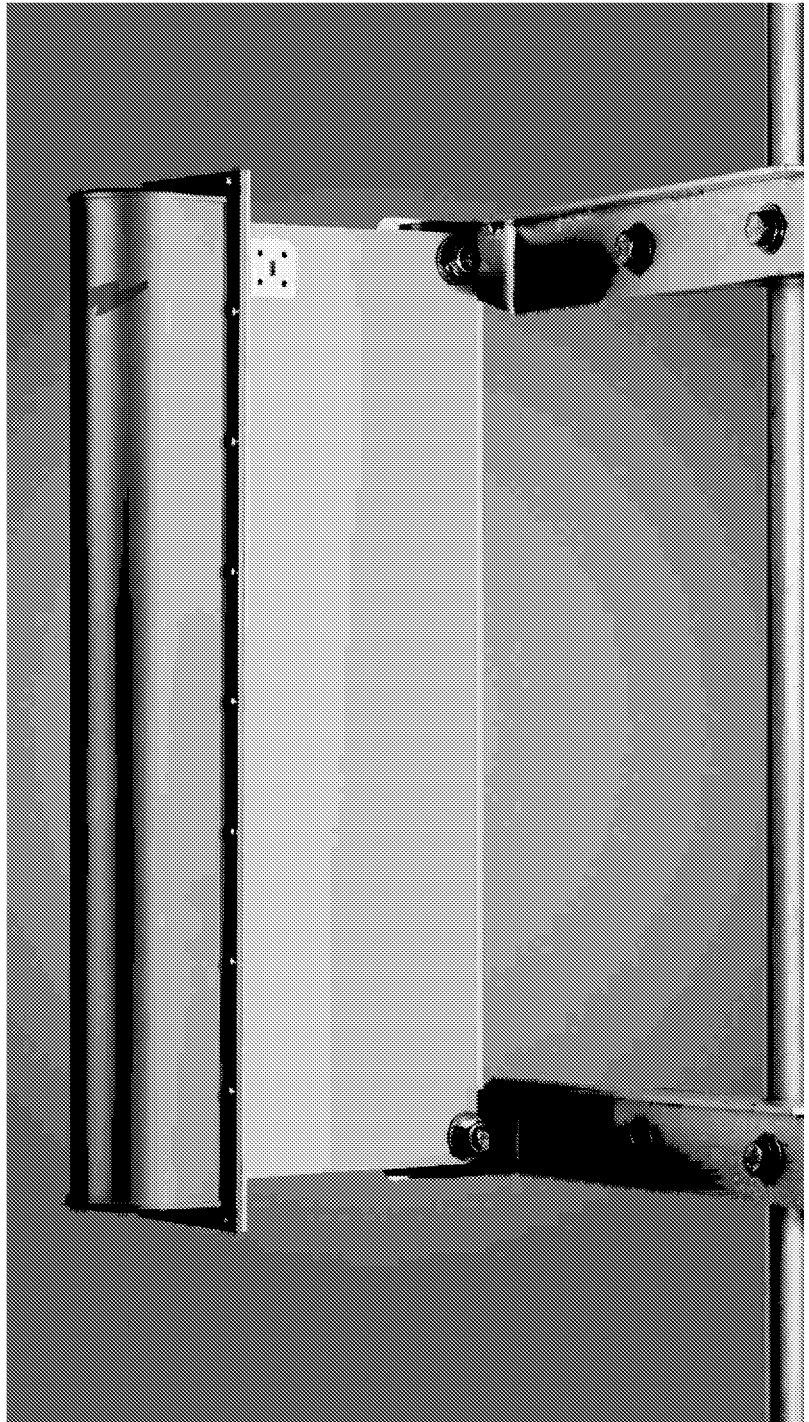
The Andrew Ultra High Gain Sector Antenna provides very high gain in an efficient size and weight. Available azimuth sizes include 45, 90, and 180 degrees in either horizontal or vertical polarization. The elevation pattern of each sector antenna is contoured to provide the required energy inside the sector coverage area, free of any nulls (see typical pattern on back). The pattern contour takes into consideration the variation of rain attenuation and free space loss within the sector coverage area.

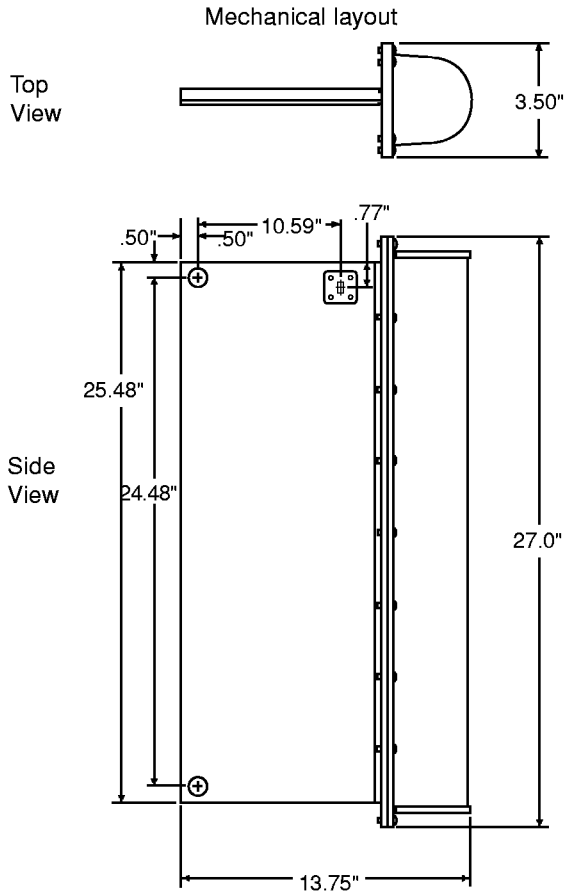
The integration-ready design incorporates a side entry waveguide port and space to accommodate an electronic enclosure.

Other patterns/performance tailored to meet your specific system requirements can be quoted upon request. Contact your Andrew representative for details.

### Features

- *Ultra High Gain Performance – 24 dBi @ 90° sector*
- *Flexible Mounting Options allow mounting of up to four antennas*
- *Equivalent pattern performance in both horizontal and vertical polarizations*
- *Pattern Enhancement - provides continuous coverage below the horizon*
- *Complete band coverage – 26.35 - 31.3 GHz*
- *Half power beamwidths of 45°, 90°, and 180° (other sizes available on request)*
- *Side entry waveguide facilitates integration of external electronics*





**Electrical Specifications**

<b>Polarization</b>	Horizontal or Vertical (specify at time of order)
<b>Polarization, discrimination, dB</b>	>24
<b>Input power rating, Watts</b>	50
<b>VSWR max. (R.L., dB)</b>	1.5 (14)
<b>Input Connector</b>	WR28 cover flange

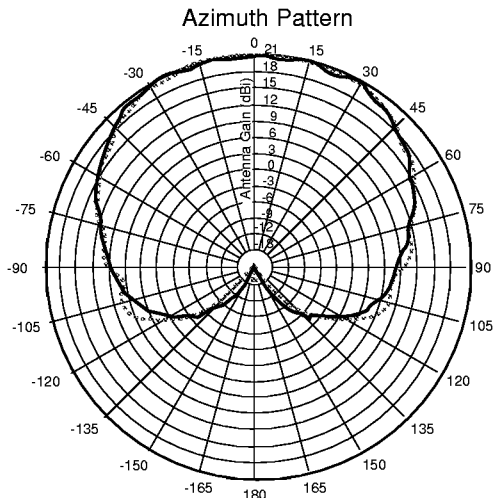
**Mechanical Specifications**

<b>Survival Wind Velocity, mi/h (km/h)</b>	125 (250)
<b>Operating temperature, °F (°C)</b>	-40 to +140 (-40 to +60)
<b>Size, approx. H x W x D, in (mm)</b>	27 x 3.5 x 13.75 (686 x 89 x 349)
<b>Color</b>	Gray
<b>Feed pressurized, maximum, lb/in<sup>2</sup> (kPa)</b>	0.5 (3.5)
<b>Weight, lb (kg)</b>	15 (6.85)

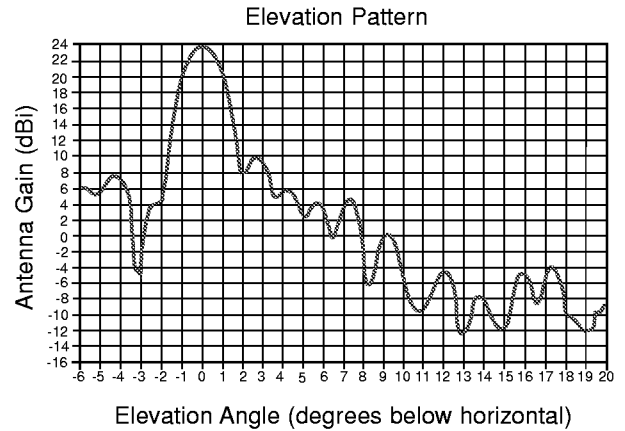
**Antenna Gain**

Antenna Type Number	Frequency Band, GHz	Sector Size Degrees (HPBW)	Gain, dBi, Nominal
BCAX045-285-*	26.35-28.5	45	26.8
BCAX045-300-*	29.0-31.3	45	26.8
BCAX090-285-*	26.35-28.5	90	24.0
BCAX090-300-*	29.0-31.3	90	24.0
BCAX180-285-*	26.35-28.5	180	21.0
BCAX180-300-*	29.0-31.3	180	21.0

\* Specify H for Horizontal Polarization and V for Vertical Polarization



Horizontal and Vertical Polarization



**Andrew Corporation**  
 10500 W.153rd Street  
 Orland Park, IL 60462 USA  
 From North America:  
 Telephone: 1-800-255-1479  
 Fax: 1-800-349-5444  
 International:  
 Telephone: 1-(708) 349-3300  
 Fax: 1-(708) 349-5444

**Fax-On-Demand**  
 From North America: 1-800-861-1700  
 International: (708) 873-3614

**Internet:** <http://www.andrew.com>

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