

## 3159C BICONICAL ANTENNA

ETS-Lindgren's Model 3159C Biconical Antenna is a broadband, linearly-polarized biconical antenna.



ETS-Lindgren's Model 3159C Biconical Antenna is a broadband, linearly-polarized biconical antenna. The 3159 Biconical Antenna exhibits a wide beamwidth and is specially designed to handle up to 10 kW input power for generating high electric field strength over a large uniform area.

Unlike a top-hat capacitively-loaded log periodic dipole antenna normally used in this frequency range, the phase center/ source distance is the same for low and high frequencies. This ensures high field strength at frequencies as low as 30 MHz. The design of the model 3159 takes advantage of the wide beamwidth feature of a

biconical antenna, and its optimized design provides low VSWR and high radiation efficiency.

An optional wheeled pedestal is available which permits horizontal and vertical antenna polarization, height, and tilt angle adjustments. A pneumatic cylinder is used to change polarization, and can be remotely controlled using an optional controller.

### Key Features

- 30 MHz to 100 MHz Frequency Range
- Biconical Elements (2 each)
- High Power Balun Handles up to 15 kW RF Input Power
- Tilt-angle and Polarization are Easily Adjustable (Optional Pedestal)
- Mounted on Wheeled Base for Easy Mobility (Optional Pedestal)

### Specifications

#### Electrical Specifications

**Frequency Minimum:** 30 MHz  
**Frequency Maximum:** 100 MHz  
**Connectors:** 1 5/8 EIA Flange  
**Impedance (Nominal):** 50  $\Omega$   
**Maximum Continuous Power:** 15 kW  
**VSWR (average)** 2:1  
**Pattern Type:** Omnidirectional  
**Polarization:** Linear

## Physical Specifications

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Custom Pedestal Dimension Height (High Range): 2 m (6.56 ft)

Custom Pedestal Dimension Height (Low Range) 1.6 m (5.25 ft)

Custom Pedestal Dimension Length 120 cm (47.24 in)

Custom Pedestal Dimension Width 120 cm (47.24 in)

Length 300 cm (118.11 in)

## Other Specifications

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- High Power Balun (15 kW)