

## 3164-05 Open Boundary Quad-Ridged Horn



ETS-Lindgren's Model 3164-05 Open Boundary Quad-ridged Horn has an open boundary design, making this antenna unique in appearance and performance. Numerically modeled, the model 3164-05's open boundary design is similar to two Vivaldi PCB antennas placed orthogonally to each other. The antenna's surprisingly compact size offers improved pattern and gain when compared with enclosed quad-ridged horns of similar dimensions. The compact size also means there is only small shift on the Model 3164s phase center as frequency changes.

The model 3164-05 offers exceptional bandwidth. While the frequency band for optimum performance is 2 GHz to 18 GHz, the antenna is usable from 1.5 GHz. Two orthogonally placed input feeds allow this antenna to generate both linear and circular polarized measurements across the entire frequency band.

### Key Features

- 2 GHz to 18 GHz Frequency Range
- Linear or Circular Polarization (With Hybrid)
- Low Side Lobes Compact Design
- Flat Gain For Upper 2/3 of Range
- Flexible Mounting Schemes
  - Flange for Wall Mounting
  - Bracket for Tripod Mounting

### Specifications

#### Physical Specifications

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Height: 17.1 cm (6.73 in)

Length: 18.4 cm (7.24 in)

Width: 17.1 cm (6.73 in)

Weight: 0.71 kg (1.57 lb)

#### Electrical Specifications

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Frequency Minimum: 2 GHz

Frequency Maximum: 18 GHz

Connectors: SMA Female

Cross Polarization Isolation: >24 dB

Impedance (Nominal): 50

Maximum Power: 25 W

Pattern Type: Directional

Polarization: Dual Linear

#### Product Options

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- Custom Case

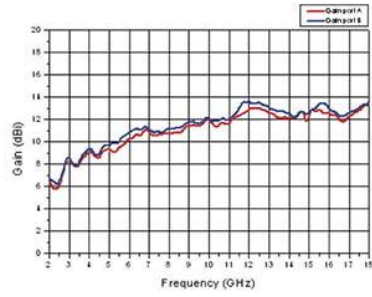
#### Product Configuration

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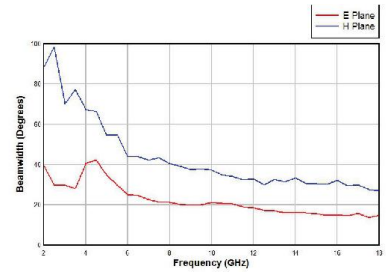
- Antenna
- Individually calibrated per ANSI C63.5
- Conformance included in Manual.
- Manual

## Charts

Model 3164-05  
Open Boundary Quad-Ridged Horn  
Gain (measured per SAE 958 Rev. C)



Model 3164-05  
Open Boundary Quad-Ridged Horn  
Half-Power Beamwidth



Model 3164-05  
Open Boundary Quad-Ridged Horn  
VSWR for Both Input Ports

