

ANTENNA MODEL 3164-11



MODEL 3164-11

- 1 GHz to 18 GHz Frequency Range
- Flat Gain For Upper 80% of Range
- Dual Linearly Polarized Compact Design
- Flexible Mounting Schemes
- Flange for Wall Mounting
- Bracket for Tripod Mounting

ETS-Lindgren's Model 3164-11 Open Boundary Quad-ridged Horn is the latest in a series of quad-ridged horns from ETS-Lindgren. The open boundary design with its absence of side plates makes this antenna unique in both appearance and performance. Numerically modeled, the Model 3164-11 is a super open boundary quad-ridged horn where the feed cavity is not enclosed. This gives wider frequency range and reduces the weight of the horn.

The 3164-11 antenna has a range that covers 1 GHz to 18 GHz, making it ideal for antenna measurement applications and as an EMC antenna for measuring emissions above 1 GHz.

Like other open boundary quad-ridged horns, the 3164-11 exhibits a very flat gain as it changes less than 2 dB for over 80% of the upper part of the frequency range.

The 3164-11 is a dual linearly polarized horn. Two orthogonally located input ports feed two set of ridge structures. These allow the horn to measure two orthogonal fields simultaneously without the need for physically rotating the horn. The isolation between the ports is better than 25 dB across the frequency range.

This antenna has a smaller, lighter design in relation to other single polarized ridged horns, while exhibiting equivalent performance with the added bonus of dual polarization.

Technical Specifications

Electrical	
Frequency Minimum	1 GHz
Frequency Maximum	18 GHz
Impedance (Nominal)	50
VSWR	3:25:1 (Maximum), <2:1 (Average)
Maximum Continuous Power	20 W
Peak Power	40 W
Pattern Type	Directional
Cross Polarization Isolation	> 25 dB
Polarization	Dual Linear
Connector	SMA (Female)
Physical	
Height	17.6 cm (6.93 in)
Width	17.6 cm (6.93 in)
Depth	19.0 cm + 8.7 cm Mounting Bracket (7.5 in + 3.4 in Mounting Bracket)
Weight	1.0 kg (2.20 lb)

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