Features:

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

The Model 3164-05 Open Boundary Quadridge Horn is the newest in a series of quadridge 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’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 quadridge horns of similar dimensions. The compact size also means there is only small shift on the Model 3164’s phase center as frequency changes.

The Model 3164-05 has 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.

Electrical Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FREQUENCY RANGE</th>
<th>CROSS-POLARIZATION ISOLATION</th>
<th>IMPEDENCE (NORMAL)</th>
<th>CONNECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>3164-05</td>
<td>2 GHz - 18 GHz</td>
<td>&gt;24 dB</td>
<td>50Ω</td>
<td>SMA Female (2)</td>
</tr>
</tbody>
</table>

Physical Specifications

<table>
<thead>
<tr>
<th>MODEL</th>
<th>LENGTH (OVERALL)</th>
<th>WIDTH (APERTURE)</th>
<th>HEIGHT (APERTURE)</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3164-05</td>
<td>18.4 cm</td>
<td>17.1 cm</td>
<td>17.1 cm</td>
<td>0.71 kg</td>
</tr>
<tr>
<td></td>
<td>7.3 in</td>
<td>6.7 in</td>
<td>6.7 in</td>
<td>1.56 lb</td>
</tr>
</tbody>
</table>

Information presented is subject to change as product enhancements are made. Contact ETS-Lindgren Sales Department for current specifications.
Wireless Antennas
Open Boundary Quadridge Horn
Model 3164-05

Gain (measured per SAE 958 rev C)

Model 3164-05 Port Isolation

Model 3164-05 VSWR for Both Input Ports

Model 3164-05 $|S_{11}|$

Model 3164-05 3dB Beam Width

Model 3164-05 10dB Beam Width
Wireless Antennas
Open Boundary Quadridge Horn
Model 3164-05

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