Horn Lens Antennas

FEATURES:
- Low Sidelobes
- Wide Bandwidths
- No Aperture Blockage
- Symmetrical E and H Plane Beamwidths
- Available From 12.4 to 140 GHz

APPLICATIONS:
- Radioastronomy
- Surveillance Equipment
- Communication Systems

DESCRIPTION:
Cernexwave’s CHA series horn lens antenna consists of a circular scalar feed horn illuminating a plano-convex lens. Housed in either aluminum or plastic, these horn lens antennas provide a high efficiency beam with equal E and H plane amplitude patterns. The CHA series antennas are available from 12.4 to 140 GHz in standard sizes of 3, 5, 6, 9, and 12-inch lens apertures. Other custom sizes and configurations are available; please consult Cernex for further information.

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Waveguide Band</th>
<th>Ku</th>
<th>K</th>
<th>Ka</th>
<th>Q</th>
<th>U</th>
<th>V</th>
<th>E</th>
<th>W</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range (GHz)</td>
<td>12.4 to 18</td>
<td>18 to 26.5</td>
<td>26.5 to 40</td>
<td>33 to 50</td>
<td>40 to 60</td>
<td>50 to 75</td>
<td>60 to 90</td>
<td>75 to 110</td>
<td>90 to 140</td>
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<tr>
<td>Sizes (inch)</td>
<td>3, 6, 9, 12</td>
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<tr>
<td>Sidelobes</td>
<td>25 dB (typical)</td>
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<tr>
<td>VSWR</td>
<td>1.2:1 (typical)</td>
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<tr>
<td>Cross Polarization</td>
<td>25 dB (typical)</td>
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NOTE: Final dimensions are subject to variations from the tabulated data due to tuning, and mechanical tolerances.

HOW TO ORDER:
Specify Model Number

CHA– LF HF GN Sz – XX

Example: To order WR-15 Horn Lens Antenna with a size of 3 inches, and a sidelobe of 25db, specify CHA50752503-XX.

CERNEXWAVE RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE