Stackable Ground-to-Air Omni Communications Antenna

FEATURES/BENEFITS:
- 116 – 150 MHz and 225 – 400 MHz Base Station Antennas
- 25 dB Isolation, Each Antenna, Co-Located
- Stack and Interconnect Up to 4 Antennas
- Radome Enclosed, Hermetically Sealed
- Use in Hostile Environment: 100 mph Wind – Rated
- DC Grounded Throughout

The TECOM models of omni-directional antennas offer improvements in aircraft and vehicular military communications. First, up to four antennas may conveniently be stacked vertically and electrically interconnected to increase the number of traffic channels. Second, the antennas are optimized for low cross-talk interference: each unit typically has 30 dB isolation, regardless of how many antennas are deployed together.

Electrical performance includes 4 dBi of gain, typically, and a transmit power capability of 300 W/CW into 50 Ohms impedance. Stacking is done by 100 mph wind – rated integral feedthrough interconnection cables (“N” Female connectors) with no degradation of individual antenna performance. Vertically polarized, the Type 401110 is omni-directional in the Azimuth plane, with a 40-degree nominal beamwidth in the vertical plane.

Mechanically, each antenna is enclosed in a low-loss radome material. Symmetrical flanged mounting bases are provided. The antennas are environmentally rugged: hermetically sealed against moisture and rated for 100-mph wind loads with one inch of radial ice.

<table>
<thead>
<tr>
<th>Type Number</th>
<th>Frequency Range</th>
<th>Gain (dBi)</th>
<th>Nominal Elevation B/W</th>
<th>Weight Lbs</th>
<th>Weight Kg</th>
<th>AN Number</th>
<th>VSWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>401110</td>
<td>225 - 400 MHz</td>
<td>4.0</td>
<td>30° min.</td>
<td>50</td>
<td>22.73</td>
<td></td>
<td>2.5:1</td>
</tr>
<tr>
<td>401131</td>
<td>116 - 150 MHz</td>
<td>4.0</td>
<td>37°</td>
<td>70</td>
<td>31.85</td>
<td>3472/G</td>
<td>2.5:1</td>
</tr>
<tr>
<td>401132</td>
<td>225 - 400 MHz</td>
<td>5.5</td>
<td>19°</td>
<td>70</td>
<td>31.85</td>
<td>3473/G</td>
<td>2.5:1</td>
</tr>
<tr>
<td>401133</td>
<td>116 - 150 MHz (2 each)</td>
<td>1.5</td>
<td>78°</td>
<td>145</td>
<td>65.98</td>
<td>3474/G</td>
<td>2.5:1</td>
</tr>
<tr>
<td>(4 antennas in one)</td>
<td>225 - 400 MHz (2 each)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Available in Federal Standard 595 colors. Antennas stack two-high, except Type 401110 which can stack four-high.

Common Electrical Performance Data:
1) VSWR: 2.5:1 Max.
2) Isolation Between Adjacent Antennas: 25 dB (stacked)
3) Polarization: Vertical
4) Power: 300 Watts/CW
5) Input Impedance - 50 Ohms
6) Each antenna is provided with multiple type “N” connectors for stacking
7) Azimuth Pattern: Omni-directional
8) Wind & Ice Load: 100 mph with 1 in radial ice

Innovative Antenna Solutions
375 Conejo Ridge Avenue, Thousand Oaks, CA 91361-4928
Phone (805) 267-0100, Fax (805) 267-0181
www.tecom-ind.com