MA-WO-UWB

138-6000 MHz Ultra Wide Band OMNI Directional Antenna

MARS MA-WO-UMB is an Ultra Wide Band OMNI Directional Antenna covering bands from 138 MHz up to 6 GHz in a single antenna radome.

Perfect matching in all bands with small ground plane.

Pattern: Omni Directional with elevation up tilted. see patterns

The antenna is PIM certified, thus making it suitable for all multi-carrier systems.

Supported applications:
TETRA, TV White-Space, LORA, LTE, GSM, UMTS, WiFi, WLAN, IoT and more.

Specifications

**Electrical**

<table>
<thead>
<tr>
<th>Frequency Range</th>
<th>Gain, typ.</th>
<th>Optimum Ground Plane Size</th>
<th>VSWR</th>
</tr>
</thead>
<tbody>
<tr>
<td>138-174 MHz</td>
<td>3dBi</td>
<td>400x400 mm, 15.7&quot;x15.7&quot;</td>
<td>1.5:1 typ. (3:1 max)</td>
</tr>
<tr>
<td>380-450 MHz</td>
<td>4dBi</td>
<td>370x370 mm, 14.56&quot;x14.56&quot;</td>
<td>1.5:1 typ. (2.5:1 max)</td>
</tr>
<tr>
<td>406-512 MHz</td>
<td>5dBi</td>
<td>165x165 mm, 6.5&quot;x6.5&quot;</td>
<td>1.5:1 typ. (2.8:1 max)</td>
</tr>
<tr>
<td>512-698 MHz</td>
<td>5dBi</td>
<td>165x165 mm, 6.5&quot;x6.5&quot;</td>
<td>2.5:1 typ. (3.5:1 max)</td>
</tr>
<tr>
<td>698-746 MHz</td>
<td>6dBi</td>
<td>165x165 mm, 6.5&quot;x6.5&quot;</td>
<td>1.5:1 typ. (2.5:1 max)</td>
</tr>
<tr>
<td>746-806 MHz</td>
<td>7dBi</td>
<td>165x165 mm, 6.5&quot;x6.5&quot;</td>
<td>1.5:1 typ. (2.5:1 max)</td>
</tr>
<tr>
<td>806-960 MHz</td>
<td>7dBi</td>
<td>165x165 mm, 6.5&quot;x6.5&quot;</td>
<td>1.7:1 typ. (2.5:1 max)</td>
</tr>
<tr>
<td>1200-2700 MHz</td>
<td>8dBi</td>
<td>Not Required</td>
<td>1.3:1 typ. (2.0:1 max)</td>
</tr>
<tr>
<td>3300-3800 MHz</td>
<td>10dBi</td>
<td>Not Required</td>
<td>1.3:1 typ. (1.7:1 max)</td>
</tr>
<tr>
<td>4100-6000 MHz</td>
<td>11dBi</td>
<td>Not Required</td>
<td>1.5:1 typ. (2.0:1 max)</td>
</tr>
</tbody>
</table>

Polarization: Linear, Vertical

Pattern: Omni Directional

PIM, 3rd order, 2X20W: <-155 dBc

Input Power, max: 50 Watts

Input Impedance: 50 Ohm

**Mechanical**

Dimensions (DxH): 40mm diameter (base diameter 72mm) x 540mm height

1.57" diameter (base diameter 2.8") x 21" height

Weight: 350 gr.

Connector: N-Type, Female

Mounting: 2" Pole Mount

Radome: UV Protected Plastic

Ground Plane: See Ordering Options

**Environmental**

Operating Temp. Range: -40°C to +70°C

Vibration: According to IEC 60721-3-4

Wind Load: 200 Km/h (Survival)

Flammability: UL94

Water Proofing: IP-65

Humidity: ETS 300 019-1-4, EN 302 085 (Annex A.1.1)

Salt Fog: According to IEC 68-2-11

**Ordering Options**

- MA-WO-UWB: Antenna for 1200-6000 MHz with Mount, and without Ground Plane
- MA-WO-UWB400: Antenna for 138-174 MHz with Mount and with Ground Plane 400x400 mm and accessories
- MA-WO-UWB370: Antenna for 380-450 MHz with Mount and with Ground Plane 370x370 mm and accessories
- MA-WO-UWB165: Antenna for 450-960 MHz with Mount and with Ground Plane 165x165 mm and accessories

Patterns available on Mars website