

MA-WABSA55-DP15_g

Preliminary

5.0-6.0 GHz Beam Steering Active Antenna, Azimuth Scan

Dual polarized Beamforming antenna for beam steering applications :

- 100 Deg coverage by 20 Deg Beamwidth.
- 15 options for beam directions with 5 Deg step.
- Reduces co-channel interferences and pointing independent beams toward various clients.



Specifications

Electrical

| | |
|--|---|
| Frequency range | 5.0-6.0 GHz |
| Polarization | Dual Pol |
| Elevation 3dB beam width | Vertical & Horizontal |
| Azimuth 3dB Beam width | 8° - 10° |
| Azimuth scan step | 15° - 20° |
| Azimuth beam control range * | (3-7)° |
| Side lobes, typ. | +/-45° * |
| Modes (External control) | -10 dB |
| | Rx or Tx, Beamforming or Broadcast |
| Beamforming (V & H polarization): | |
| | Gain of passive antenna part, typ. |
| | Gain with LNA's (Broadside), typ. |
| Rx Mode: | Noise figure (Rx channel), typ. |
| | Output Operating RF Power (Output PA), typ. |
| Tx Mode: | Gain with PA (Broadside), typ. |
| Broadcast (V & H polarization): | |
| | Gain of passive antenna part, typ. |
| | Azimuth 3dB Beam width |
| | Azimuth 5dB Beam width |
| Rx Mode: | Gain with LNA's, typ. |
| Tx Mode: | Output Operating RF Power (Output PA), typ. |
| | Gain with PA, typ. |
| Max Input RF Power (damage) | 18dBm |
| VSWR | 2 : 1 |
| Impedance | 50 Ohm |
| Front to Back Ratio, min. | -30 dB |
| Cross Polarization, typ. | -20 dB |
| Port-Port Isolation, typ. | -25 dB |
| Beam and Modes selection time, typ. | 1-2 us |
| External Power supply | +5V ; PoE (+48 B) |
| External control interface | GPIO (7 wires) |
| Lighting protection | DC grounded |

* - For Azimuth beam control range +/- (30-45)° : Gain = Gain, typ. - (~3) dB; Side Lobes < -(1-3)dB.

Mechanical

| | |
|--------------------|-----------------------------------|
| Dimensions (HxWxD) | 370x370x60mm (TBD) |
| Weight | TBD |
| Connectors RF | SMA Type Female |
| DC connectors | TBD |
| Radome | UV Protected Polycarbonate, white |

Environmental

| | |
|-----------------------|---|
| Operating Temperature | -20°C to +60°C |
| Dynamics | IEC 60721-3-4 |
| Humidity | ETS 300 019-1-4, EN 302 085 (annex A.1.1) |
| Salt Fog | IEC 68-2-11 |
| Water Proofing | IP-67 |

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