

## MA-PBSA56-DP21

**Preliminary**

### 5-6 GHz Passive Antenna For Beam Steering, Azimuth Scan

Array antenna for Beam Steering Applications

- Dual polarized antenna four columns each.
- Distance  $0.5 \lambda$  between columns in the center frequency.



### Specifications

#### Electrical

|                                                      |                         |
|------------------------------------------------------|-------------------------|
| Frequency range                                      | 5 - 6 GHz               |
| Polarization                                         | Dual Pol                |
|                                                      | V&H                     |
| <b>Individual Column</b>                             |                         |
| Gain, typ.                                           | 16 dBi                  |
| 3 dB Beam-Width, Azimuth Plane                       | $90^\circ \pm 10^\circ$ |
| Cross Polarization, typ.                             | -20 dB                  |
| Front to Back Ratio, min.                            | -30 dB                  |
| <b>Array 4 Columns</b> (Equal Amp & Phase Boresight) |                         |
| Gain, typ.                                           | 21 dBi                  |
| 3 dB Beam-Width, Azimuth Plane, typ.                 | $25^\circ$              |
| Cross Polarization, typ.                             | -20 dB                  |
| Front to Back Ratio, min.                            | -30 dB                  |
| <b>General</b>                                       |                         |
| 3 dB Beam-Width, Elevation Plane, typ.               | $8^\circ$               |
| Side Lobes, Elevation Plane, typ.                    | -12 dB                  |
| Input power, max                                     | 10W                     |
| Input Impedance                                      | 50 Ohm                  |
| Lightning Protection                                 | DC Ground               |

#### Mechanical

|                    |                                                 |
|--------------------|-------------------------------------------------|
| Dimensions (HxWxD) | 370 x 370 x 40 mm (14.5"x 14.5"x 1.6")          |
| Weight             | 2 kg                                            |
| Connector          | 8 x N-Type, Female                              |
| Back Plane         | Aluminum protected through chemical passivation |
| Radome             | UV Protected, Plastic                           |
| Mount              | See Ordering Options                            |

#### Environmental

|                             |                                           |
|-----------------------------|-------------------------------------------|
| Operating Temperature Range | - 40°C to + 65°C                          |
| Vibration                   | According to IEC 60721-3-4                |
| Wind Load                   | 200 km/h (survival)                       |
| Flammability                | UL94                                      |
| Water Proofing              | IP-67                                     |
| Humidity                    | ETS 300 019-1-4, EN 302 085 (annex A.1.1) |
| Salt Fog                    | According to IEC 68-2-11                  |
| Ice and Snow                | 25mm radial (survival)                    |

### Ordering Options

|                |                                                                 |
|----------------|-----------------------------------------------------------------|
| MA-PBSA56-DP21 | Antenna Suited for MNT-22 (optional wall/pole adjustable mount) |
| MA-PBSA56-DP21 | Antenna with MNT-22 mount                                       |

MARS Antennas & RF Systems proprietary information

MARS reserves the right to make technical changes or modifications to any of its products and specifications without prior notice and without implementing such changes to prior supplied products. Product images are representative and indicative only. Warranty terms and general conditions of sale are applicable on any purchase of any product, available on MARS website.

3 Hamanor st. Holon 5886103, P.O.Box 1852 Holon 5811801, Israel

Tel: +972-3-5599661 • Fax: +972-3-5599677 • e-mail: mars@marsant.co.il • web: www.mars-antennas.com