

## MA-WA82220DB-DP14

### 698-960 MHz & 1700-2700 MHz Stadium Dual Band & Dual Pol Directional Antenna

MARS new DUAL BAND and DUAL POL antenna specially **designed for arenas and stadiums** that have to supply high capacity and reliable wireless data.

MARS MA-WA82220-DBDP14 provides solutions for services such as LTE, Cellular (2G, 2.5G and 3G), Wi-Fi and WiMAX applications. The antenna is PIM certified, thus making it suitable for all multi-carrier systems.

Additional Features:

- Efficient and stable performance with 12-13 dBi of gain.
- UV protected radome suitable for harsh environment installations
- Durable construction
- Easy mounting allowing Az/EI adjustment
- Aesthetic design
- Weatherized and durable
- Wind survival rating of 200 km/h

**Available in iBwave database**



### Specially designed for Stadiums

## Specifications

		<b>Electrical</b>	
Frequency range		698-960 MHz	1700-2700 MHz
Gain, typ.	V-pol H-pol	12 dBi 13 dBi	13 dBi 13 dBi
VSWR, max.		2.0 : 1	
Polarization	Dual Pol	Vertical & Horizontal	
Port to Port Isolation, min.		-22 dB	-37 dB
3dB Beam-Width, Azimuth, typ.		35°	35°
3dB Beam-Width, Elevation, typ.		35°	35°
Front to Back Ratio, min.		-22 dB	
PIM, 3 <sup>rd</sup> order, 2X20W		-150 dBc	
Input power, max.		50 Watt	
Impedance		50 Ohm	

		<b>Mechanical</b>
Dimensions (HxWxD)		800 x 600 x 110 mm (31.5" x 23.6" x 4.33")
Connector		2 x N-type Female
Weight		6 Kg.
Mounting		See Ordering Options
Radome		UV Protected Plastic
Back Plane		Aluminum protected through chemical passivation.

		<b>Environmental</b>
Operating Temperature Range		-55°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

## Ordering Options

MA-WA82220DB-DP14	Antenna 2 x N-type Female connectors Suited for MNT-25 mount
MA-WA82220DB-DP14D	Antenna 2 x 7/16 Female connectors Suited for MNT-25 mount
MA-WA82220DB-DP14MD	Antenna 2 x 4.1/9.5 Female connectors Suited for MNT-25 mount
MA-WA82220DB-DP14B	Antenna 2 x N-type Female connectors with MNT-25 mount

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