



## **MA-WA58-1X**

# 5 GHz Broadband Subscriber Antenna

MARS 5 GHz Broadband High Gain Antenna covers the full 5 GHz spectrum, from lower to higher UNII band, including its unlicensed part. Additional Features:

- Exceptionally high gain of 23 dBi over the entire frequency band.
- Diamond shape provides the highest range of ETSI standards, up to TS5.
- · Light weight and durable construction.
- DC grounded for lightning protection to meet local electrical building codes.

The MARS 5GHz Antenna & Enclosure Solution comprises of Waterproof 5 GHz Broadband Antenna and Weatherproof Enclosure with provisions for Az/El Mounting device. This solution enables WISP/Integrator to design his own low cost, weatherized subscriber unit, saving high costs of special antenna-radio integration.



## **Specifications**

## Electrical

Frequency range	4.9-5.875 GHz	
GAIN, typ.	23 dBi @ 5.15-5.875	21 dBi @ 4.9-5.15
VSWR, max.	1.5 : 1 @ 5.15-5.875	1.9 : 1 @ 4.9-5.15
Polarization	Linear, Vertical	
3 dB Beam-Width, H-Plane, typ.	10.5°	
3 dB Beam-Width, E-Plane, typ.	10.5°	
Side Lobes, min.	-23 dB	
Cross Polarization, min.	-24 dB	
Front to Back Ratio, min.	-30 dB	
Input power, max.	30 Watt	
Input Impedance	50 Ohm	
Lightning Protection	DC Grounded	

#### Mechanical

Dimensions (HxWxD)	305 x 305 x 15 mm (12" x 12" x 0.6")	
Weight	840 gr.	
Connector (without enclosure)	N-Type, Female	
Connector (with enclosure)	SMA Female	
Back Plane	Aluminum; protected through chemical passivation	
Radome	UV Protected Polycarbonate	
Enclosure - Small	171 x 167 x 68 mm. (External dimension)	
Enclosure - Large	287 x 287 x 68 mm. (External dimension)	
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)	

### Standard Compliance

4.9-5.15 GHz ETSI EN 302 085 V1.2.3 - TS1, TS2, TS3 5.15-5.875 GHz ETSI EN 302 085 V1.2.3 - TS1, TS2, TS3, TS4, TS5

Ordering Options		
MA-WA58-1X PM	Antenna with N-Type Female connector with integral Pole Mount includes stainless steel brackets	
MA-WA58-1X MNT	Antenna with N-Type Female connector Suited for MNT-22 (optional wall/pole adjustable mount)	
MA-WA58-1XMNTB	Antenna with N-Type Female connector with MNT-22 mount	
MA-WA58-1XSMESY	Antenna with small enclosure, SMA Connector and MNT-22	
MA-WA58-1XSMESZ	Antenna with small enclosure, SMA Connector with PEMs and MNT-22	
MA-WA58-1XSMELY	Antenna with large enclosure, SMA Connector and MNT-22	
MA-WA58-1XSMELZ	Antenna with large enclosure, SMA Connector with PEMs and MNT-22	

## Patterns are available on our website

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