

## 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, loT and more.**



## Specifications

### Electrical

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

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](mailto:mars@marsant.co.il) • web: [www.mars-antennas.com](http://www.mars-antennas.com)