

**5 GHz Base Station Antenna, 120°
MA-WE55-15**

MARS 120° Broadband Sector Antenna provides a cost effective solution for large scale WLL, WLAN, H-LAN, ISM, UNII, and Point-to-Multi-Point applications.

Additional Features:

- stable performance with 15 dBi of gain
- small size allowing for easy blending with any environment
- pole mount allowing for quick and easy installation and tilting adjustment
- UV protected radome suitable for harsh environment installations



Specifications:

Electrical	
Frequency range	4.9 – 6.1 GHz
GAIN, typ.	15 dBi
VSWR, max.	1.8 : 1
Polarization	Linear, Vertical
3 dB Beam-Width, H-Plane, typ.	120°
3 dB Beam-Width, E-Plane, typ.	8°
Side Lobes, min.	ETSI EN 302 085 V1.2.3 – CS1
Cross Polarization, min.	ETSI EN 302 085 V1.2.3 – CS1
Front to Back Ratio, min.	ETSI EN 302 085 V1.2.3 – CS1
Input power, max	50 Watt
Input Impedance	50 Ohm
Lightning Protection	DC Grounded
Mechanical	
Dimensions (HxWxD)	573 x 95 x 53 mm (22.6"x3.7"x2.1")
Weight	700 gr.
Connector	N-Type, Female
Back Plane	Aluminum; protected through chemical passivation
Radome	UV Protected Plastic
Mount	MNT-22
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-65
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)
Service Life	>10 years
Standard Compliance	
ETSI EN 302 085 V1.2.3 – CS1	

Specifications subject to change without notice

Mounting instructions - Azimuth and Elevation Adjustable Mount MNT-22

Fig .1

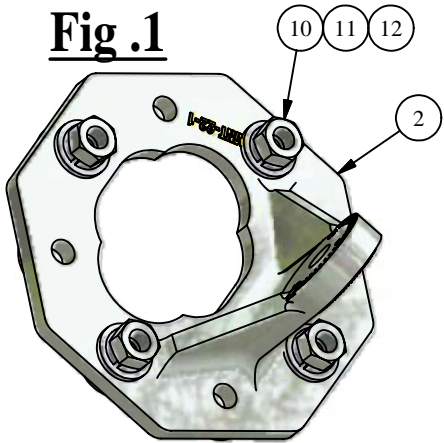


Fig .2

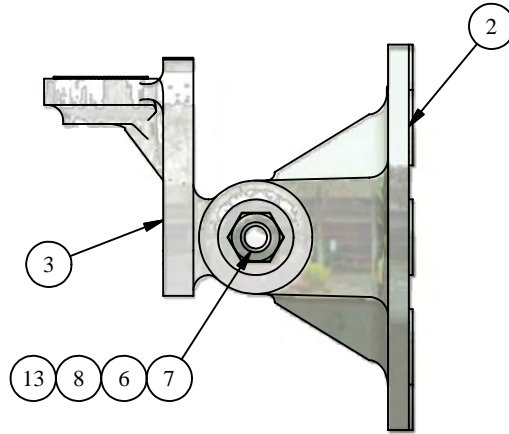
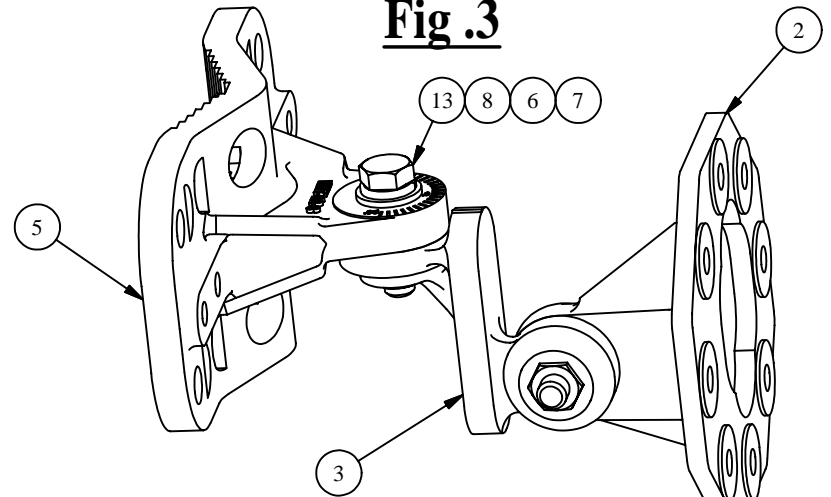


Fig .3



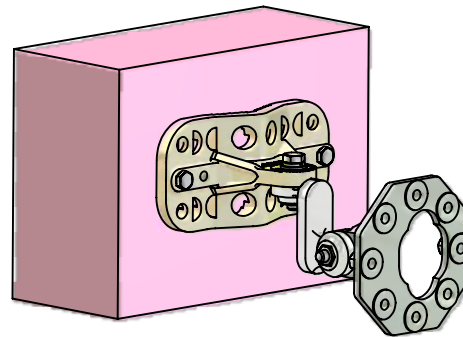
1. Place item No.2 on the antenna, as illustrated in the drawing. Align with the screw holes.
2. Connect item No. 2 to the antenna with spring washers (11), flat washer (10) and nuts (12).
3. Tighten the nuts at a torque of 30 In*Lbs.

4. Connect item No. 3 to item No. 2 ONLY as illustrated in Fig.2, with items 6,7,8,13. Leave screw slightly loose.

5. Connect item No. 3 to item No. 5 as illustrated, with items 6,7,8,13. Leave screw slightly loose.

Fig .5

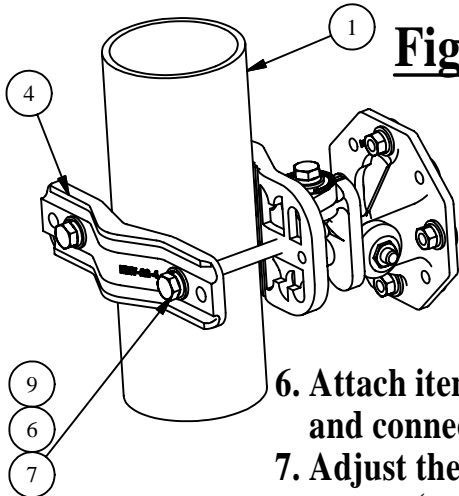
Wall Mounting



NOTE :

1. MOUNT MNT-22 SUITABLE FOR POLES Ø1"-4".

Fig .4



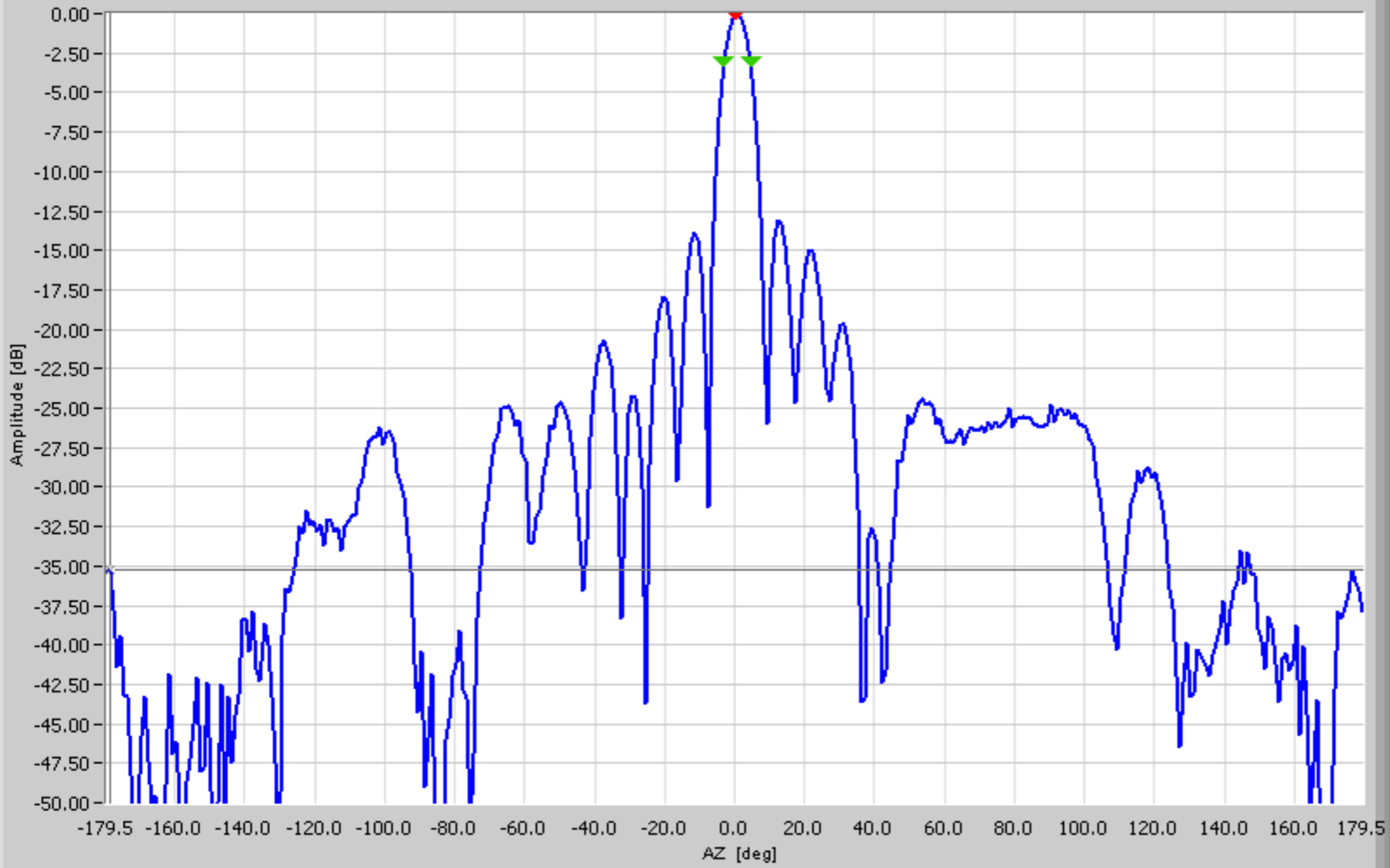
6. Attach items No. 4 and 5 to the pole as illustrated, and connect them using items No. 6,7,9.
7. Adjust the desired angle, and fully tighten the loose screws (paragraph 4,5).
8. Tighten the nuts at a torque of 30 In*Lbs.

Parts List		
ITEM	QTY	DESCRIPTION
1	1	POLE 1"-4" (NOT SUPPLIED)
2	1	MNT-22-1
3	1	MNT-22-2
4	1	MNT-22-4
5	1	MNT-22-3
6	4	Helical Spring Lock Washer St. St. #5/16
7	4	Plain Washer St. St. #5/16
8	2	Hex Cap Screw St. St. NC 5/16-18 x 1.25"
9	2	Hex Cap Screw St. St. NC 5/16-18 x 5"
10	4	Plain Washer St. St. #1/4
11	2	Helical Spring Lock Washer St. St.#1/4
12	4	Hex Nut St. St. NC 1/4-20
13	2	Hex Nut St. St. NC 5/16-18

Operator: MARS

MA-WE55-15 E-plane

MARS ANTENNAS & RF SYSTEMS
MARS ANTENNAS RANGE



Side lobes Database Az.Ratio

No.	Ampl	Deg

AZ [deg]

Amplitude [dB]

Phase [deg]

- Amplitude [dB]
- Phase [deg]
- Not Aligned
- Normalized
- Phase wrapped
- Log Display
- No Skirt

MA-WE55-15-CAL.nff -178.50 -35.23

A	P	File Name	POL [deg]	Freq. [GHz]	ROLL [deg]	Ch.	Beam		Switch		Beam Peak [dB]		Beam Width [deg]		Null Depth [dB]		GainA dBi
							Value	[deg]	Value	[deg]	Value	[deg]	Value	[deg]			
		MA-WE55-15-CAL.nff	90.00	5.500 G	90.00	CH1					P	7.32	3.00	P		14.55	

