

4.9-5.875 GHz Dual Polarized Antenna

MA-WA56-DP25N

MARS 5 GHz Dual Polarized Antenna designed to provide full coverage for the 5 GHz frequency band.

Additional Features:

- efficient and stable performance
- high gain/size ratio
- light weight and durable construction
- UV protected radome made of polycarbonate allowing for harsh weather installations
- easy mounting allowing for Az/EI adjustment



Specifications:

<i>Electrical</i>		
Frequency range		4.9 - 5.875 GHz
GAIN	V-Pol:	24.5 ± 1 dBi
	H-Pol:	23.5± 1 dBi
VSWR, max.		1.7 : 1
Polarization		Linear, Vertical & Horizontal
3 dB Beam-Width, H-Plane, typ.		7°- 9°
3 dB Beam-Width, E-Plane, typ.		7°- 9°
Side Lobes, min.		ETSI TS3, TS4, TS5
Cross Polarization, typ.		- 25 dB
Port to Port Isolation,typ.		- 30 dB
Front to Back Ratio, min.		ETSI TS3, TS4, TS5
Input power, max		5 Watt
Input Impedance		50 Ohm
Lightning Protection		DC Grounded
<i>Mechanical</i>		
Dimensions (HxWxD)		370 x 370 x 40 mm (14.5" x14.5" x1.6")
Connector		2 x N-Type, Female
Weight		2.1 kg
Back Plane		Aluminum; protected through chemical passivation
Radome		UV Protected Polycarbonate
Mounting		MNT-22
<i>Environmental</i>		
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
Service Life		>10 years

Specifications subject to change without notice

Mounting instructions - Azimuth and Elevation Adjustable Mount MNT-22

Fig .1

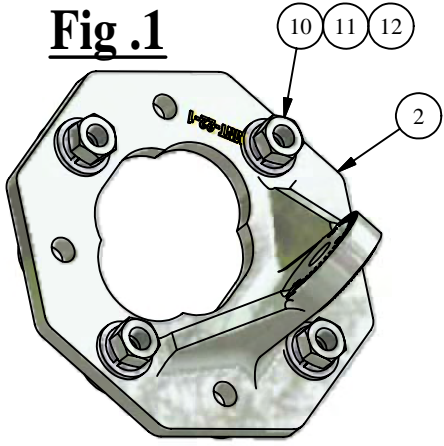


Fig .2

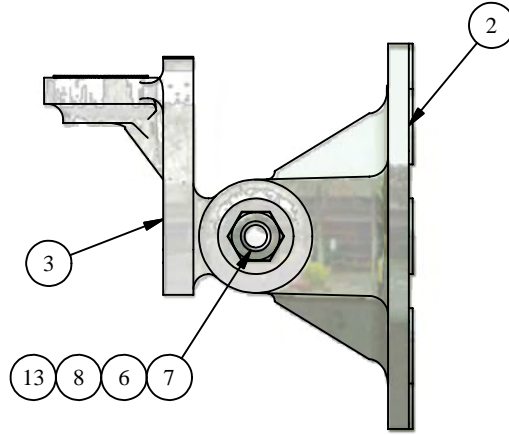
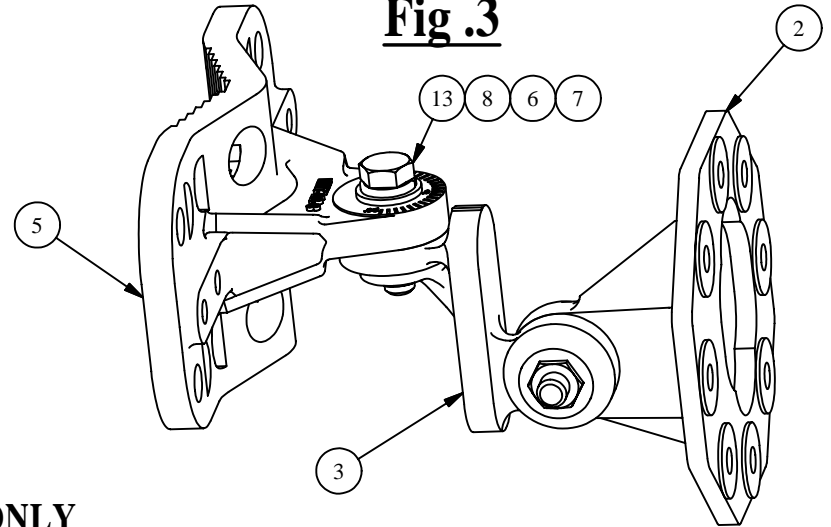


Fig .3



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

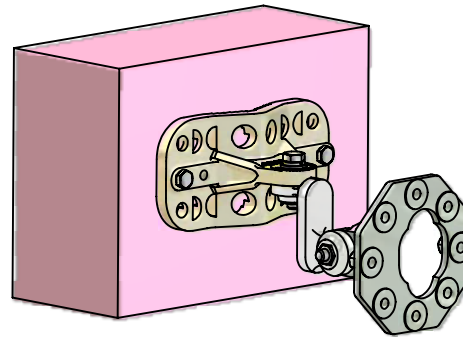
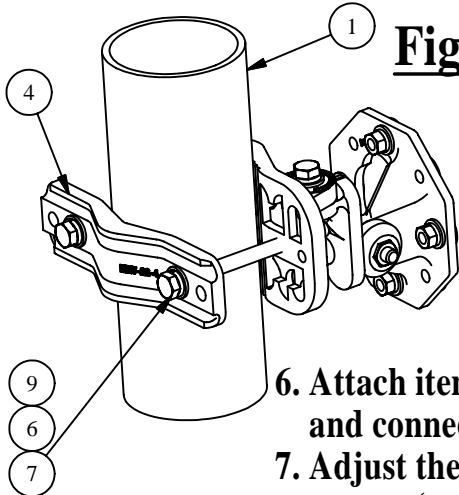


Fig .4



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.

NOTE :

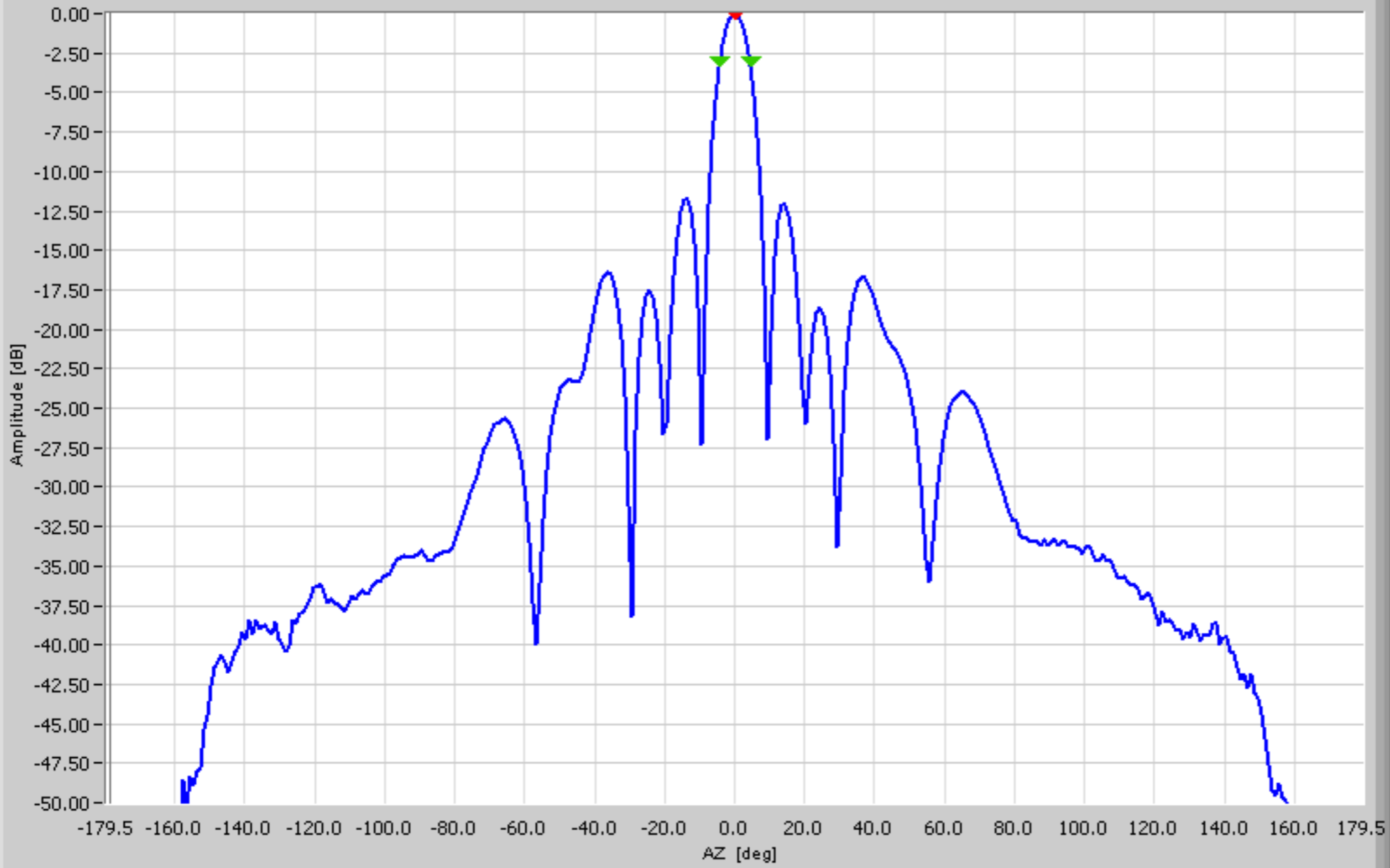
1. MOUNT MNT-22 SUITABLE FOR POLES Ø1"-4".

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-WA56-D25N H-pol. H-plane

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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

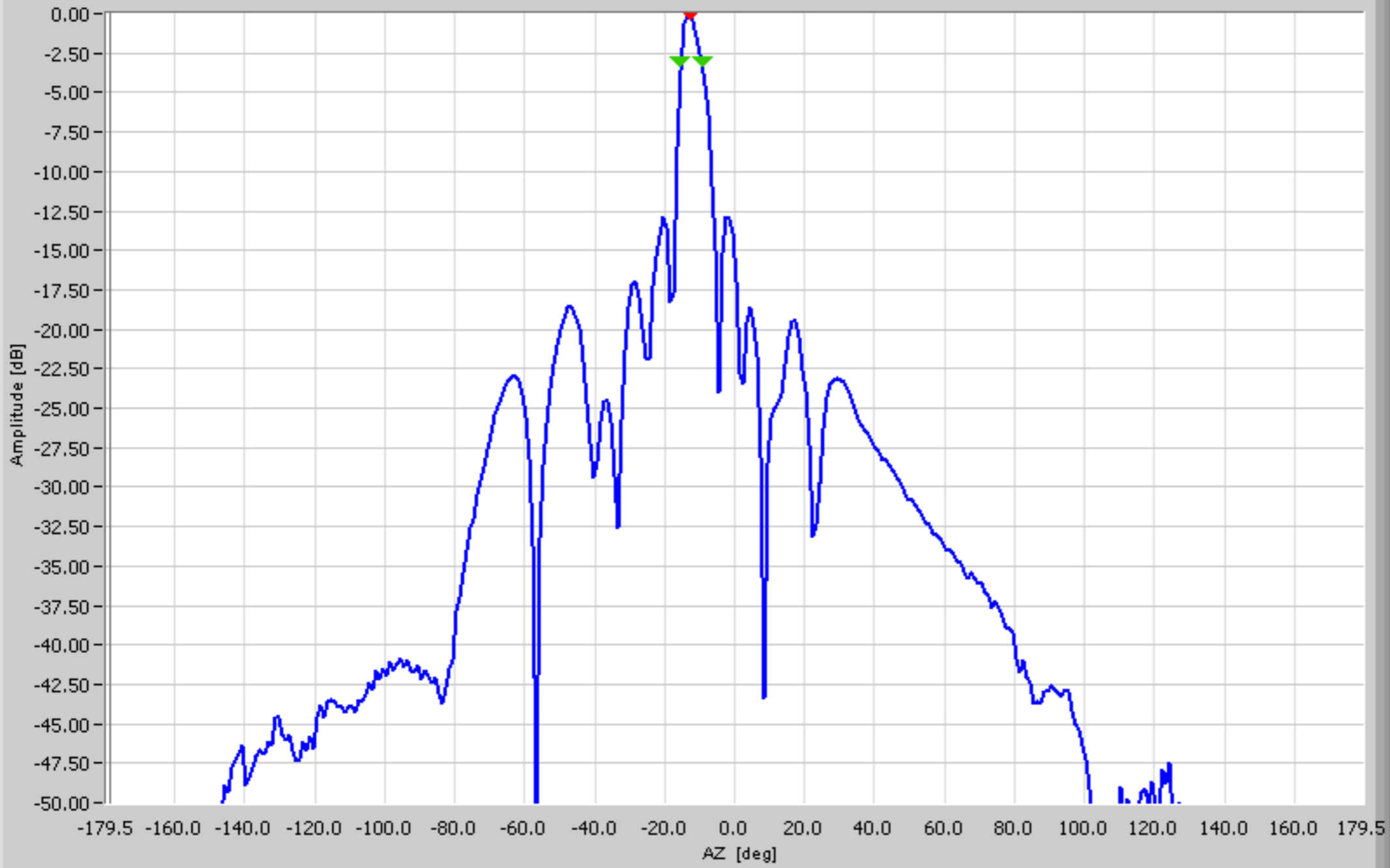
MA-WA56-DP25N H-pol.

A	P	File Name	ROLL [deg]	Freq. [GHz]	POL [deg]	Ch.	Beam	Switch	Beam Peak [dB]			Beam Width [deg]			Null Depth [dB]		GainA dBi
									Value	[deg]	P	Value	At dB	P	Value	[deg]	
		MA-WA56-DP25N H-pol.nff	0.00	5.400 G	0.00	CH1			23.52	0.50	P	8.49	3.00	P		23.52	

Operator: MARS

MA-WA56-D25N V-pol. E-plane

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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

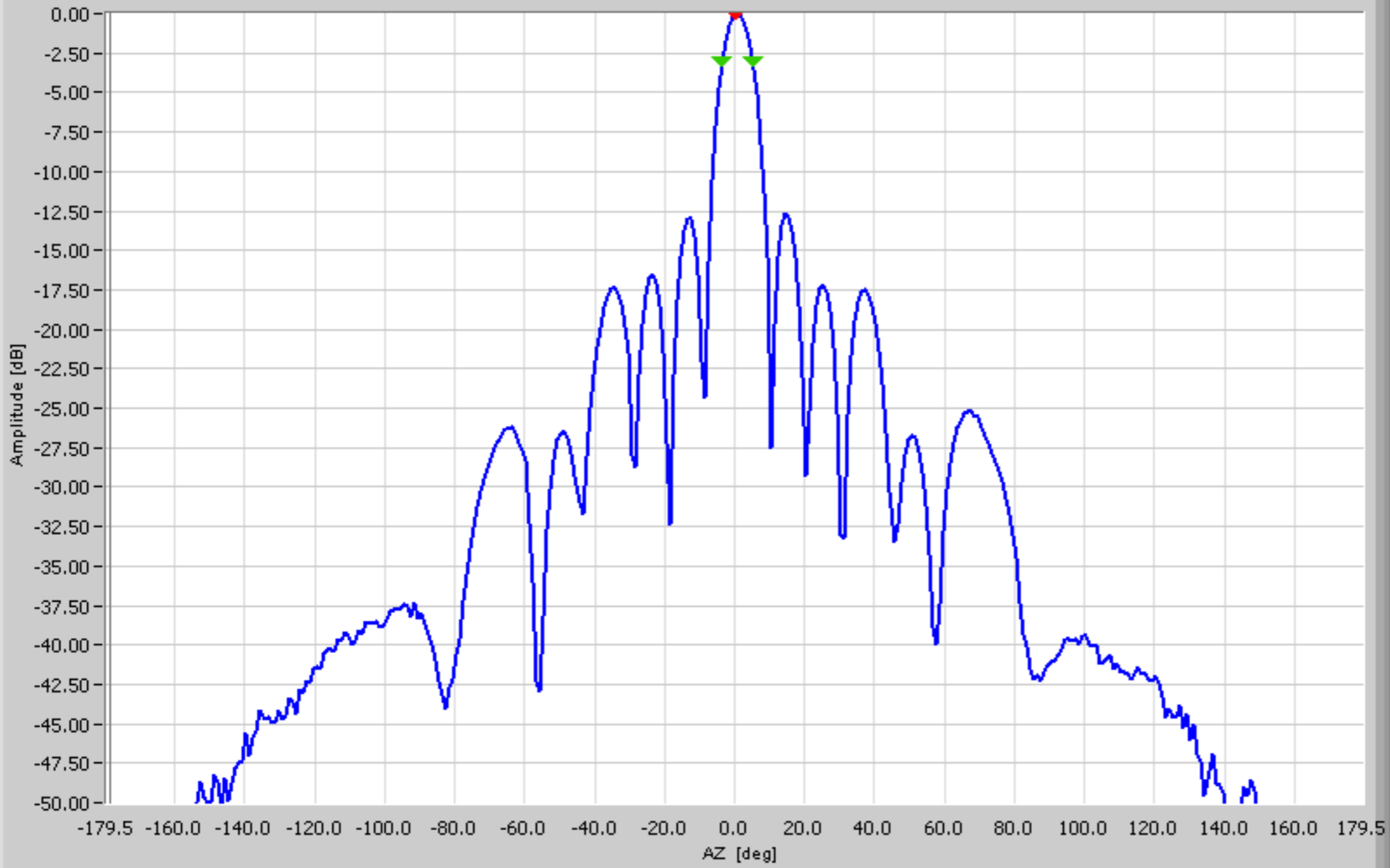
MA-WA56-DP25N V-po -178.50 -59.48

A	P	File Name	ROLL [deg]	Freq. [GHz]	POL [deg]	Ch.	Beam	Switch	Beam Peak [dB]			Beam Width [deg]			Null Depth [dB]			GainA dBi
									Value	[deg]	P	Value	At dB	P	Value	[deg]		
		MA-WA56-DP25N V-pol.nff	0.00	5.400 G	90.00	CH1			24.46	-12.50	P	5.68	3.00	P			24.62	

Operator: MARS

MA-WA56-D25N V-pol. H-plane

MARS ANTENNAS & RF SYSTEMS
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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-WA56-DP25N V-po -178.50 -59.04

A	P	File Name	ROLL [deg]	Freq. [GHz]	POL [deg]	Ch.	Beam	Switch	Beam Peak [dB]			Beam Width [deg]			Null Depth [dB]			GainA dBi
									Value	[deg]	P	Value	At dB	P	Value	[deg]	P	
		MA-WA56-DP25N V-pol.nff	90.00	5.400 G	0.00	CH1			24.62	0.50	P	8.57	3.00	P			24.62	