DATA SHEET

Model No. : ANT50-D1200PC

Description : 2.4~2.5/5.15~5.875 GHz PANEL ANTENNA

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Rev : 2

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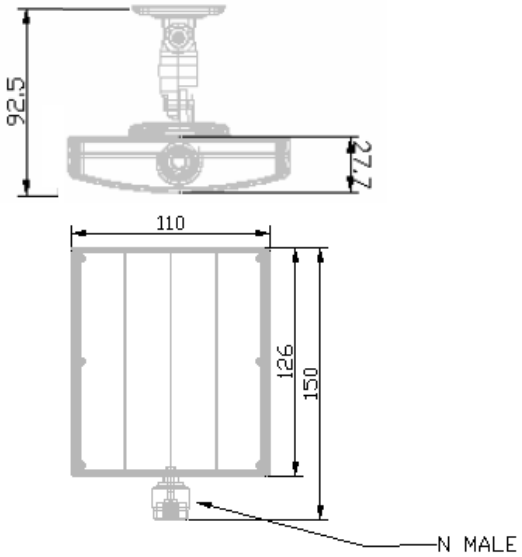
1. OVERVIEW & SPECIFICATIONS



Electrical Specifications:

Frequency Range :	2.4~2.5/5.15~5.875 GHz
VSWR :	≤ 2.0
Impedance :	50Ω ± 5Ω
Gain :	7.5/12dBi
Polarization :	Vertical
Power Handling :	10 Watt

Mechanical Specifications:

Connector :	N FEMALE
Operation Temp. :	-30℃ ~ +60℃
Material :	Radome: ABS
	Base: ABS
Dimension (L*W*H) :	150*110*60.3 mm
Weight :	150g ± 30g (w/ mount)
Color :	WHITE

3D Illustration

(The Connector will be N FEMALE)

2. TESTING CONDITION

2.1 TEST SETUP

VSWR measurement (S11): Use ROHDE & SCHWARZ ZV8 Network Analyzer with Harbour RG-142 coaxial cable: 1000mm length in free space.

2.1.1 VSWR

The table as below summarizes concern about Return loss measurement according to The frequency band is based on FWS design. The detail be shown as appendix that is from ROHDE & SCHWARZ ZV8 Network Analyzer

VSWR Performance		
Freq(MHz)	2400	2483.5
Free space	1.35	1.87

VSWR Performance					
Freq(MHz)	5150	5200	5300	5400	5500
Free space	1.38	1.28	1.48	1.26	1.42

VSWR Performance				
Freq(MHz)	5600	5700	5800	5825
Free space	1.54	1.55	1.28	1.46

3. GAIN MEASUREMENT

3.1 TEST SETUP

The gain of the antenna was measured by **FWS** Chamber. The chamber provides less than –30 dB reflectivity from 800 MHz through 6 GHz and a 60cm diameter spherical quite zone. The measurement results are calibrated using both **SCHWARZBECK** horn standards. A decoupling sleeve is used to reduce feed line radiation

3.2 TEST RESULT

The peak gain is picked up as table list from Network analyzer in Chamber room, the completely gain plots also be shown as appendix.

Peak Gain (dBi) / Beam width(°)			
Freq(MHz)	2400	2450	2500
H PLANE	8.51/74.6	7.65/76.5	7.23/77.4
E PLANE	7.49/49.8	2.45/45.6	6.67/50.3

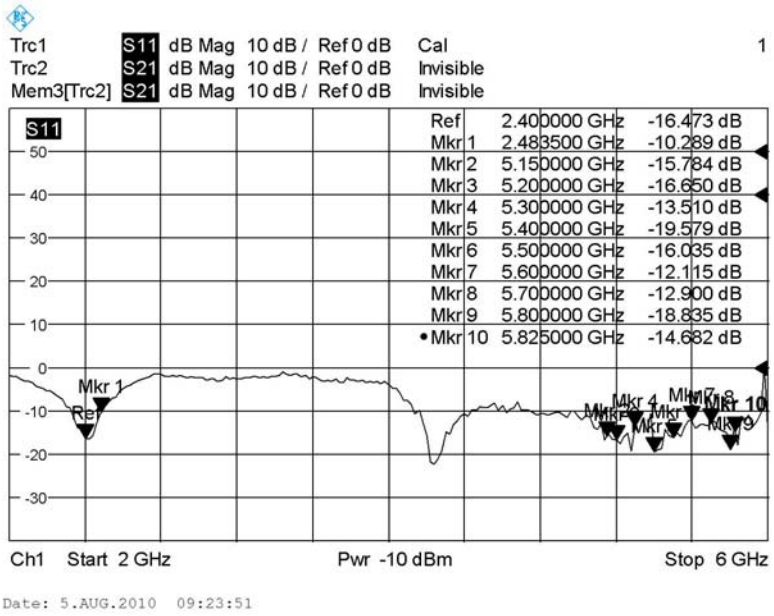
Peak Gain (dBi) / Beam width(°)					
Freq(MHz)	5150	5200	5300	5400	5500
H PLANE	12.71/47.4	12.04/46.1	12.02/46.1	12.21/50.4	12.02/51.2
E PLANE	13.31/21.5	12.76/21.5	12.51/20.8	12.7/20	12.47/20.4

Peak Gain (dBi) / Beam width(°)				
Freq(MHz)	5600	5700	5800	5825
H PLANE	10.99/46.9	10.03/46	11.25/45.1	11.37/45.1
E PLANE	11.62/18.3	10.8/19.2	12.29/21.2	12.37/21.3

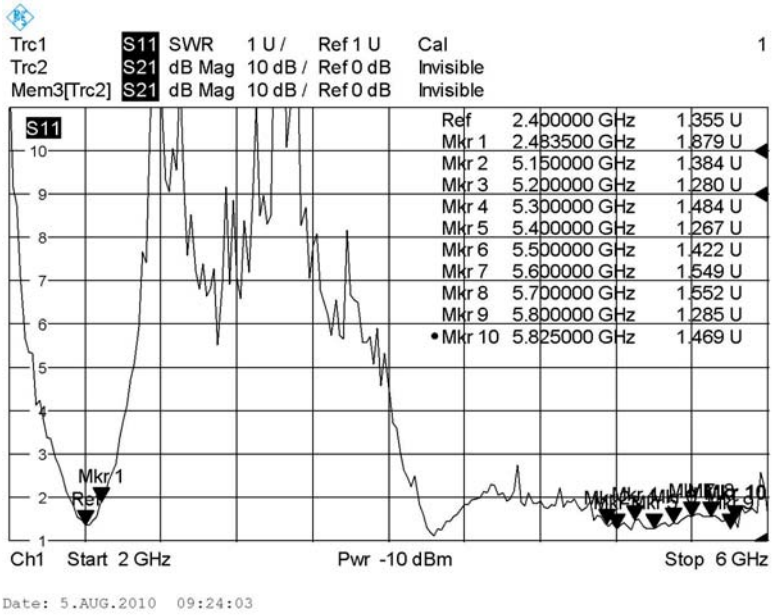
4. APPENDIX

4.1 RETURN LOSS & VSWR

RETURN LOSS

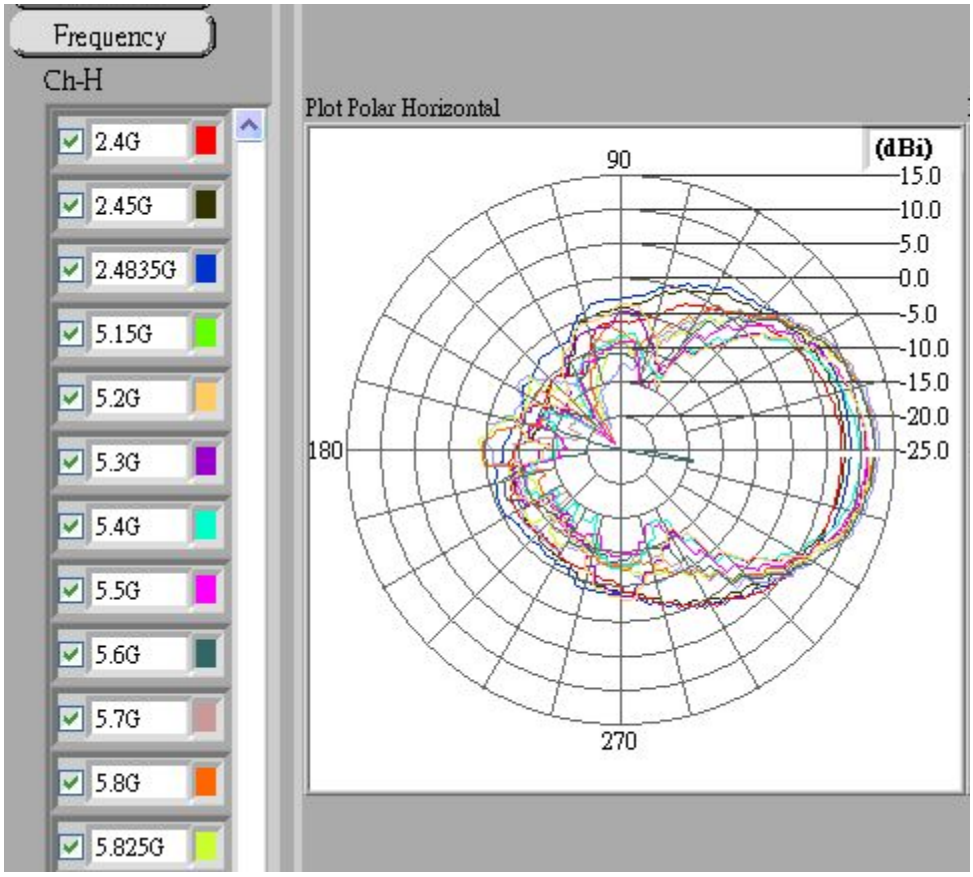


SWR



4.2 RADIATION PATTERN

H-PLANE



E-PLANE