

**LP-PANELM5023****4.9-5.9 GHz Band 23 dBi Gain Dual Polarized vertical and Horizontal,  $\pm 45^\circ$ , Directional Outdoor MIMO Panel Antenna.**

LPPANELM5023\_SS\_ENB01W

**Features:**

- 4.9 –5.9 GHz Band.
- IEEE 802.11a. 802.11n Wireless LAN.
- Directional and multipoint applications.
- Bluetooth.
- Public Wireless Hotspot.
- Wireless Video Systems.
- Horizontal and Vertical Polarizable plus  $\pm 45^\circ$ .
- 23 dBi Gain.
- Low Profile, Unobstructive and ideal for indoor or outdoor use.
- Stainless steel and aluminum Mounting hardware.
- Tilt down capability for optimal angle positioning.
- Vertical Beam-width: Port1= $8^\circ$  / Port2= $8^\circ$ .
- Horizontal Beam-width: Port1= $8^\circ$  / Port2= $8^\circ$ .
- 2 x N-Female Connectors or SMA.
- Weight: 1 Kg.
- Impedance 50 Ohm.
- Lightning discharges DC Short protection.
- RoHS Compliant.



**LP-PANELM5023**  
**4.9-5.9 GHz Band 23 dBi Gain Dual Polarized vertical and Horizontal,  $\pm 45^\circ$ , Directional Outdoor MIMO Panel Antenna.**

The LP-PANELM5023 is a 4.9-5.9 GHz Band with a solid 23dBi Gain Dual Polarized vertical and Horizontal,  $\pm 45^\circ$ , Directional Outdoor MIMO Panel Antenna that can be used for IEEE 802.11a wireless LAN, N-Mimo, Bluetooth, public wireless hotspot and other coverage. Ideal for Point-to-Point (PtP) and Point to Multipoint (PtMP) applications mainly for connecting distant clients even if they are several kilometers away from the servers

The LP-PANELM5023 has two (2) N-Female connectors and can be directly mounted on a pole featuring vertically or horizontally polarization and  $\pm 45^\circ$ . It can also be installed with a degree tilt mounting kit on other types of supports like our LP-PAW universal mounting system pole.

The internals are designed on Rogers (PCB) with ABS casing and aluminum body for the base. These antennas are unobstructive, good looking, reasonable priced and easy to install.

Fully weather proof and UV resistant, easy to hide, they can be painted with non-conductive oil paints.

Is a good substitute for parabolic antennas when distance and performance are not so critical. It is very simple to align.



**A Electrical Specifications**

Description	Specification
Frequency Range	4900 MHz - 5900 MHz
V.S.W.R (MAX)	2.0:1
Antenna Type	MIMO Panel
Radiation	Directional
Gain (MAX)	23 dBi
Polarization	Vertical and Horizontal plus $\pm 45^\circ$
Maximum Power	50 Watt
Vertical Beam-width	Port1=8°/ Port2=8°
Horizontal Beam-width	Port1=8°/ Port2=8°
FBR	> 37 dB
Isolation	> 35 dB
Impedance	50 Ohm
Antenna Design	Patch Array
Internal Material	PTFE (Rogers PCB)
Connector	N-Female x 2

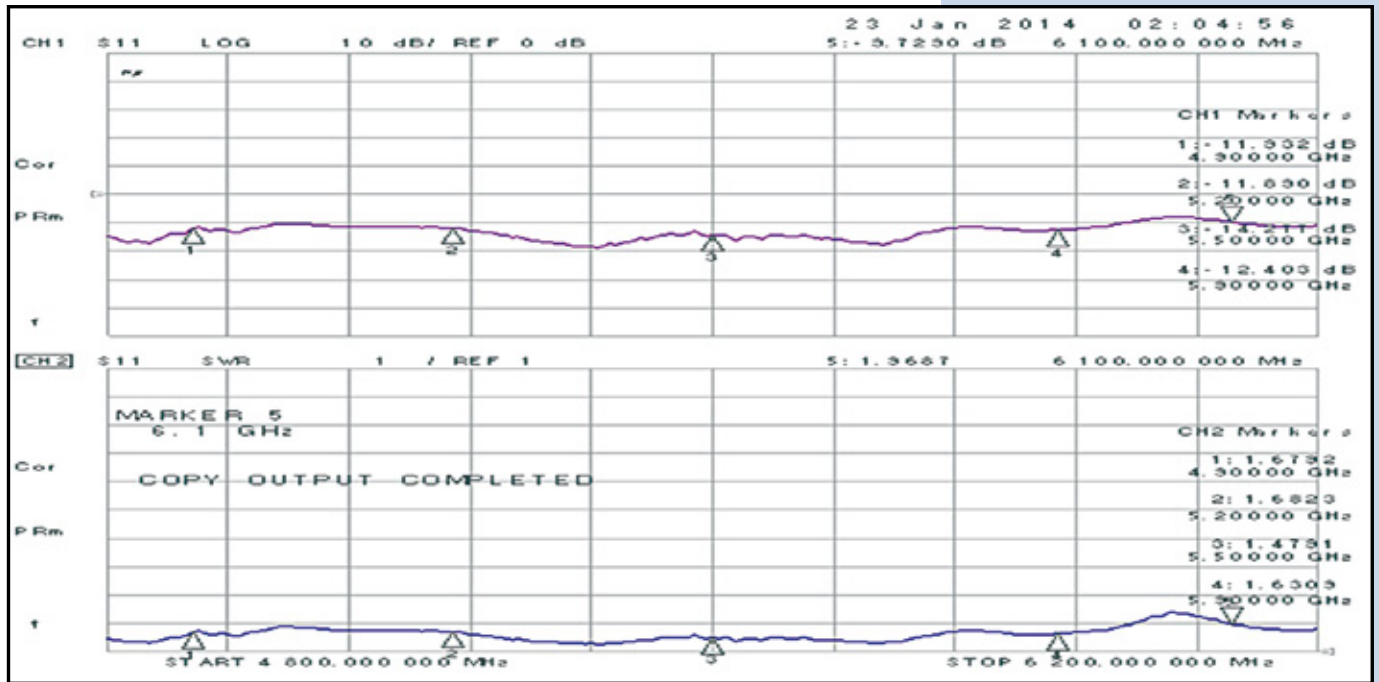
**B Mechanical Specifications**

Length x Width x Height (MAX)	384.6 × 384.6 × 23 mm
Antenna Weight (G.W)	1400 g
Application	Indoor / Outdoor
Radome Material and Color	UV resistant ABS (White)
Plate Material	Aluminum
Mount Style	1- 1.5" Pole Mount
Mounting	Stainless Steel and Aluminum
Wind Survival	> 150 MPH
Storage Temperature	-40 ~ +80°
Operating Temperature	-40 ~ +60°
Operating Humidity	10% ~ 90% non-condensing
Storage Humidity	5% ~ 90% non-condensing
Safety, Emission and other.	RoHS

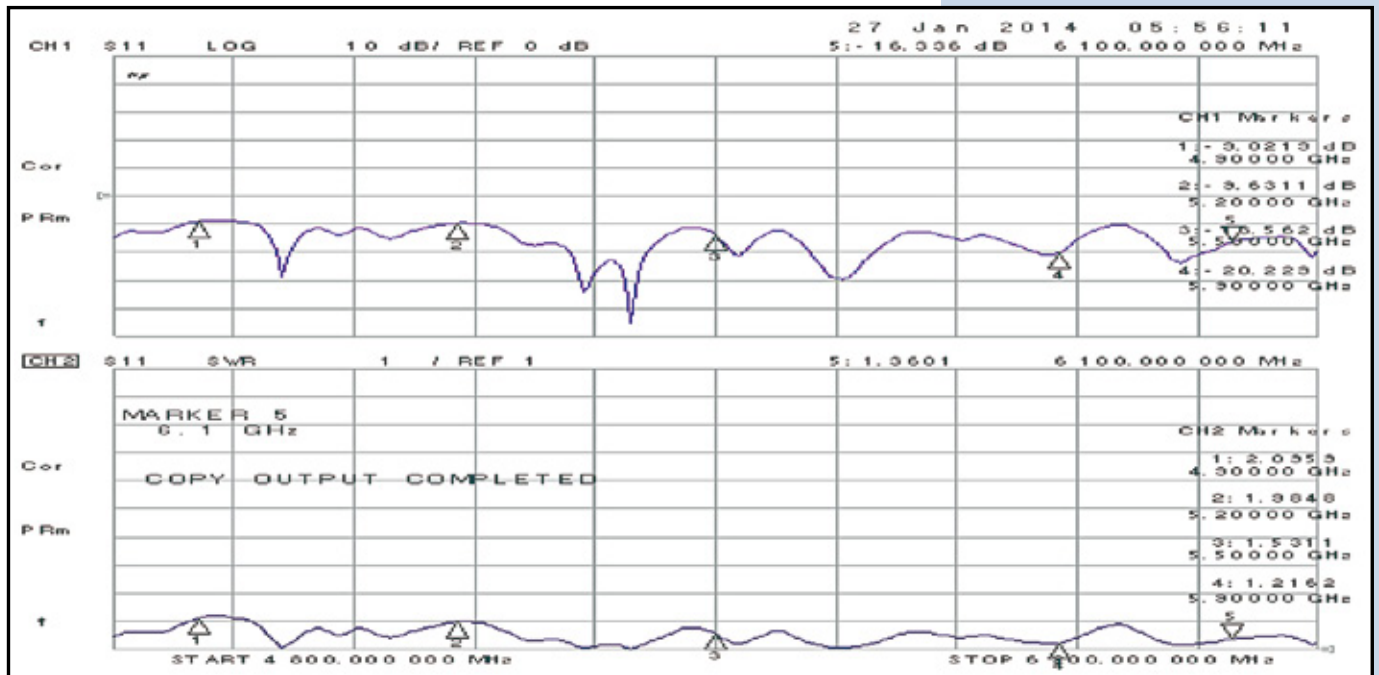
**C Network Analyzer Test Report**

Test Equipment	Agilent 8720ET 50MHz-20.5GHz
Test Equipment Cable	Agilent 60cm Sma male to Sma male
RF connector Adapter	Agilent SMA-Female to N-Male DC~18GHz
Correction	85052D-DC-26.5Ghz
Test Model	<b>LP-PANELM5023</b>
Test Port	S11, S21

**D** Port 1 Return Loss & V.S.W.R



**E** Port 2 Return Loss & V.S.W.R



**E** Reporte de prueba en cámara anecoica RF

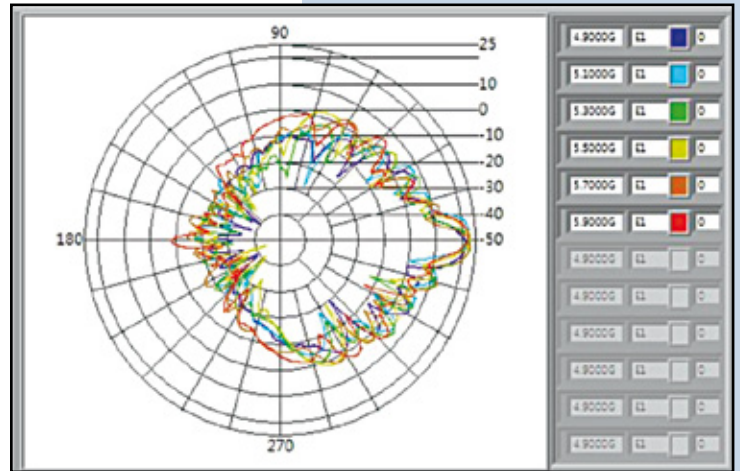
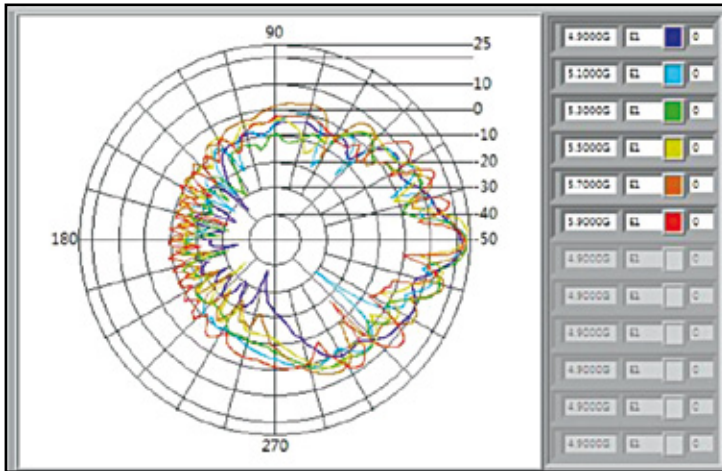
<b>Test Equipment</b>	Agilent 8720ET 50 MHz-20.5 GHz
<b>Chamber</b>	7M(D) X 7M(H) X14M(L)
<b>Test Frequency</b>	5.1 GHz-5.9 GHz
<b>Horn Antenna</b>	700 MHz – 18 GHz, Gain 3 dBi to 18 dBi

**VERTICAL PATTERN**

**HORIZONTAL PATTERN**

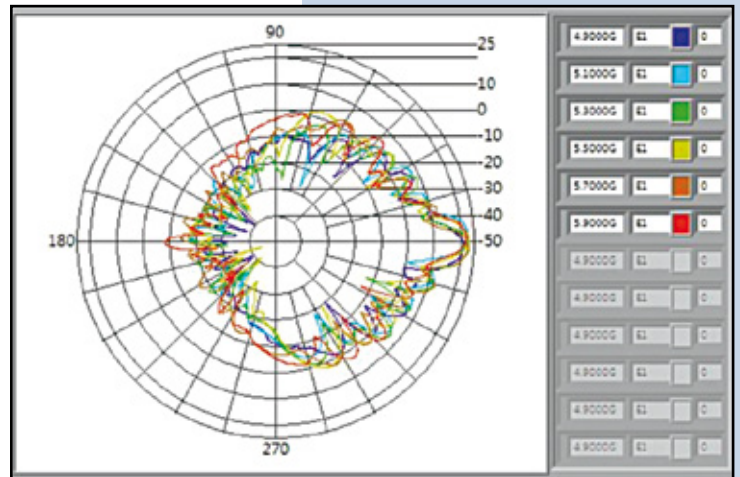
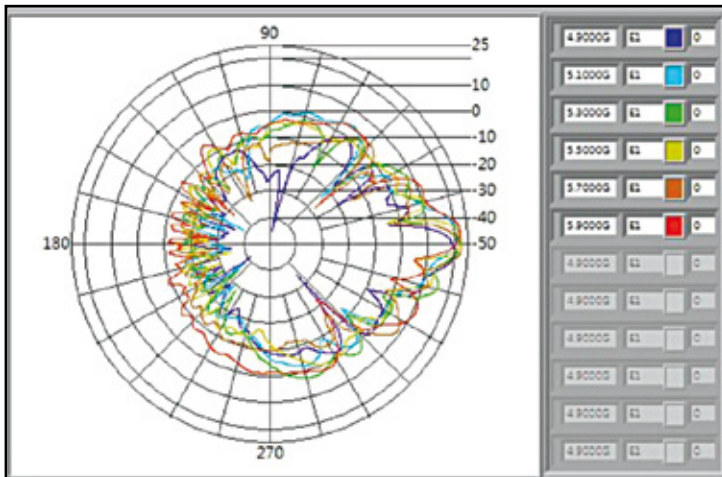
Port1-E-plane co-pol -3dB beam-width=8°

Port1-H-plane co-pol -3dB beam-width=8°



Port2-E-plane co-pol -3dB beam-width=8°

Port2-H-plane co-pol -3dB beam-width=8°



**F** How to Order:

**LP-PANELM5023 4.9-5.9 GHz Band 23dBi Gain Dual Polarized Vertical and Horizontal ±45° Directional Outdoor MIMO Panel Antenna.**