

ANTENNAS | WLAN-61

# WLAN-61: DUAL BAND WI-FI ANTENNA

## 2.4GHZ & 5GHZ DUAL BAND 4X4 DIRECTIONAL WIFI ANTENNA



- Water resistant
- Wi-Fi and LTE compatible Robust antenna
- 4X4 MiMo
- Dual Band 2.4Ghz and 5GHz

### Product Overview

The new Wi-Fi Dual-Band MIMO antenna, developed by Poynting Antennas, can connect to any Wi-Fi access point whether it is older Wi-Fi technology or new dual band Wi-Fi technology. Multiple Dual Band antennas can resolve channel saturation and provide the ultimate in Wi-Fi performance and flexibility. This 4x4 MiMo antenna has 4 different antenna orientations in one enclosure. This means the antenna can be used in a 2x2, 3x3 and if necessary a 4x4 antenna configuration.

The Wide beamwidth ensures good coverage in offices, halls and factories etc. The antenna operates in two frequency bands 2.4 GHz and 5 GHz, offering excellent utilization of the radio spectrum. This Antenna has 9dBi gain at 2.4GHz band and 11dBi gain at the 5GHz band, which offers the best performance with reliable connections. The housing is made of ABS which is high impact resistant plastic and is also resistant to acids and other chemicals that may occur in industrial plants.

The antenna can be opened on the side where the 4 x SMA female connectors are placed. The cable can be fed through the bypass gland, which eliminates the joint to the antenna extension cables. This eliminates connector losses and the need for taping and waterproofing the connectors for an outdoor installation. This antenna is designed for installations where 4x4 (four independent streams), multiplexing time-space technologies is needed. It can be used indoors or outdoors and is ideal for use in warehouses, production facilities, building sites or any other environment that requires Wi-Fi connectivity, such as computers, mobile phones, tablets, and any other IOT devices.

### Application areas

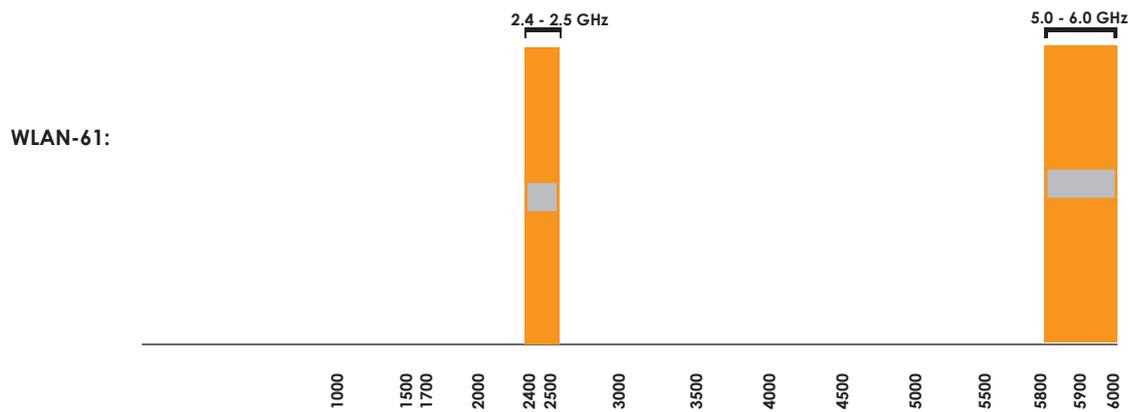
- Offices
- Factories
- Poor data signal reception (indoor or outdoor)
- Warehouses
- Open mine areas and areas with a lot of radio frequency noise.
- M2M



## Frequency bands

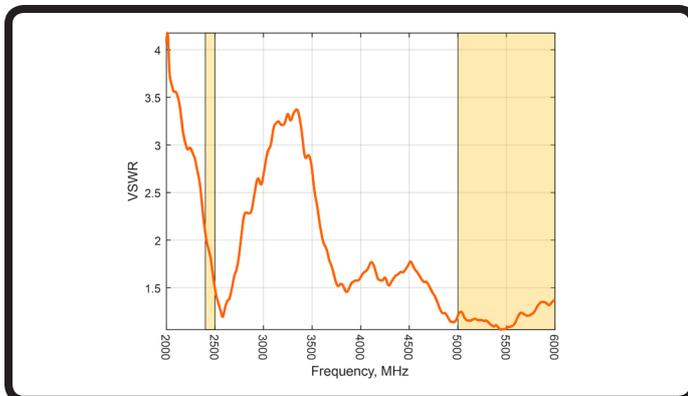
The WLAN-61 is a wide-band antenna that works across 2400 - 2500 & 5000 - 6000 MHz

 Indicates the bands on which this antenna works



## Antenna Performance Plots

### VSWR:



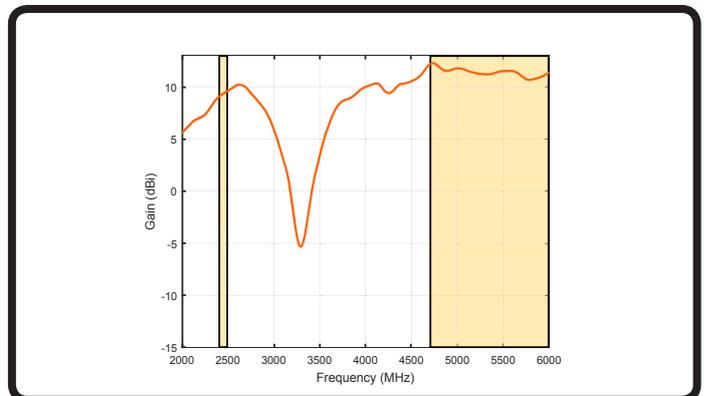
### Voltage Standing Wave Ratio (VSWR)\*

VSWR is a measure of how efficiently radio-frequency power is transmitted from a power source, through a transmission line, into a load. In an ideal system, 100% of the energy is transmitted which corresponds to a VSWR of 1:1.

WLAN-0061 delivers superior performance across all bands with a VSWR of 2.0:1 or better.

\*VSWR measured with 1m low loss cable

### Gain: (excluding cable loss)



### Gain\* in dBi

11 dBi is the peak gain across all bands from 2.4-2.5GHz & 5.0 - 6.0GHz

Gain @ 2400 - 2500 MHz:

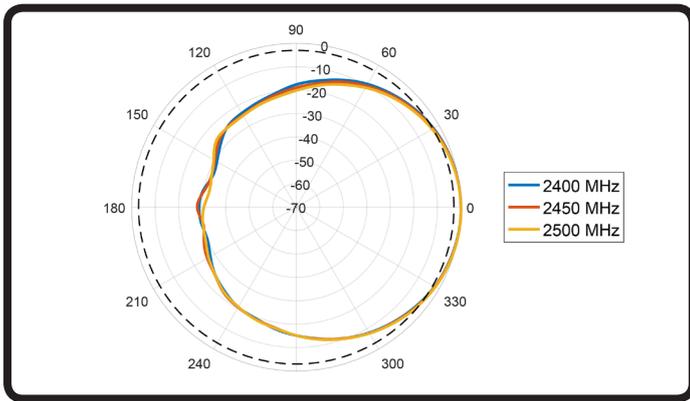
9 dBi

Gain @ 5000 - 6000 MHz:

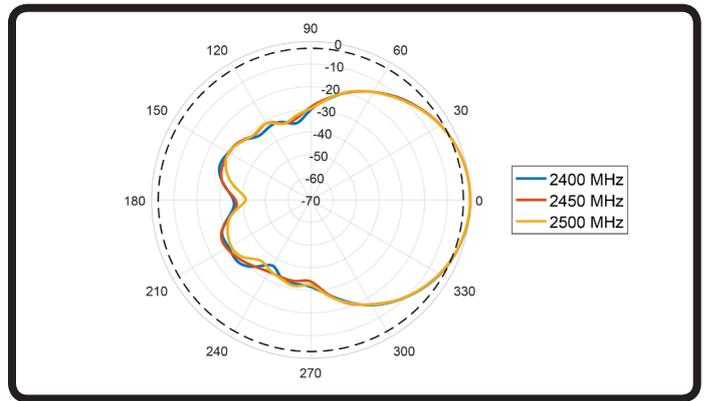
11 dBi

\* Antenna gain measured with polarisation aligned standard antenna

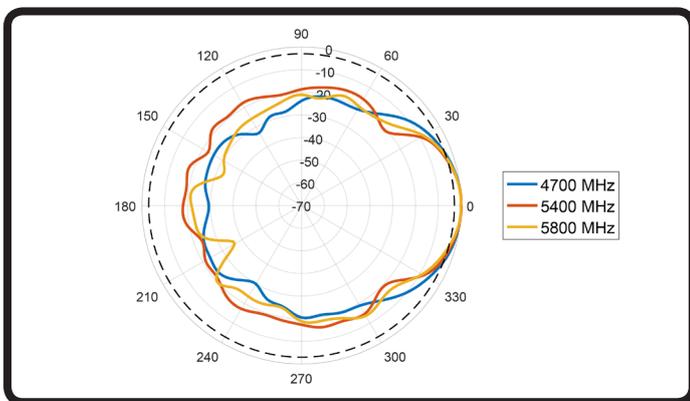
H-Plane: 2400-2500 MHz



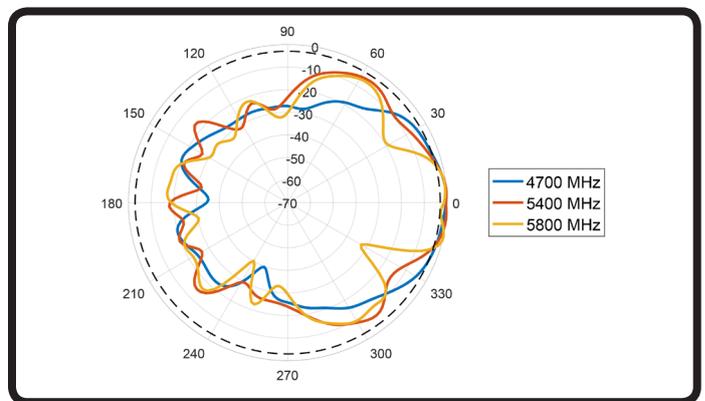
E-Plane: 2400-2500 MHz



H-Plane: 4700 -5800 MHz



E-Plane: 4700 -5800 MHz



## Electrical Specifications

Frequency Bands:	2400 - 2500 MHz 5000 - 6000 MHz
Gain (Max):	11 dBi
VSWR:	<2.0:1
Feed Power Handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Linear Vertical
Path to ground:	Yes
Cable Length:	N/A
Cable Type:	N/A
Connector:	SMA Female
Beamwidth:	2400 - 2500 MHz: 48° 4700 - 5800 MHz: 34°

## Environmental Specifications

Wind Survival:	160km/h
Temperature Range (Operating):	-40°C to +70°C
Environmental Conditions:	Outdoor/Indoor
Operating Relative Humidity:	Up to 98%
Storage Humidity:	5% to 95% - non condensing
Storage Temperature:	-40°C to +70°C

## Ordering Information

Commercial name:	WLAN-61
Order Product Code:	A-WLAN-0061-V1
EAN number:	0707273469670

## Additional Accessories Available

Extension Cables:	None
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For more detailed information and availability in your region, visit our web site: [www.poynting.tech](http://www.poynting.tech)

## Mechanical Specifications

Product Dimensions (L x W x D):	240 mm x 240 mm x 60 mm
Packaged Dimensions:	260 mm x 280mm x 80mm
Weight:	760.6g
Packaged Weight:	1334.8g
Radome Material:	ABS (Halogen Free)
Radome Colour:	Cool Gray (1C) RAL 7047

## Product Box Contents

Antenna:	A-WLAN-0061-V1
Mounting Bracket:	Cast aluminium swivel bracket

*The cable and connector is factory mounted to the antenna*



## Certification Approvals and Standards

Flammability rating:	UL 94-V0
Water Ingress Protection Ratio/Standard:	IP 65 (NEMA 4X)
Impact resistance:	IK 08
Salt Spray:	MIL-STD 810F /ASTM B117
Product Safety:	Complies with UL, CE, EN, CSA and IEC standards



## Contact Poynting

### Poynting Antennas (Pty) Ltd - Head Office

Unit 4, N1 Industrial Park  
Landmarks Avenue,  
Samrand, 0157  
South Africa

**Phone:** +27 (0) 12 657 0050

**E-mail:** [sales@poynting.co.za](mailto:sales@poynting.co.za)

### Poynting Europe

Regus Business Center Neue Messe Riem  
Kronstadter Straße 4  
81677 München  
Germany

**Phone:** +49 89 208026538

**E-mail:** [sales-europe@poynting.tech](mailto:sales-europe@poynting.tech)

### WLAN-61

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Product Specifications may change without prior notice  
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