













ANTENNAS | WLAN-61 SERIES

UNI-DIRECTIONAL, DUAL-BAND WI-FI ANTENNA

4x4 Wi-Fi (MIMO); 2400 – 2500 MHz, 9 dBi; 5000 – 6000 MHz, 11 dBi



 2400 – 2500 MHz 5000 – 6000 MHz	 11 dBi	 Increase X Mb/s	 Uni-Directional	 Machine to Machine	 2.4 – 2.5 GHz 5.0 – 6.0 GHz
 2.4 GHz & 5 GHz	 IP 65	 -40°C to +80°C	 Fire Resistant	 Urban  Rural/Farm	

APPLICATION AREAS

- High performance directional 4X4 MIMO antenna
- Dual-band 2.4 GHz and 5 GHz Wi-Fi antenna
- Wide beamwidth for optimum coverage
- Compliant with IEEE 802.11a/b/g/n/ac/ax wireless standards
- Robust design for vandal and dust resistance (IP 65)
- Easily mountable on pole

Product Overview

The WLAN-61 is a dual-band Wi-Fi MIMO antenna, developed by Poynting Antennas, that provides dual-band Wi-Fi coverage in the 2.4 GHz and 5 to 6 GHz bands, making it ideal for any Wi-Fi access point, whether it is using older Wi-Fi technology or new Wi-Fi technology that goes up to Wi-Fi 6 (802.11ax). 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 the two Wi-Fi frequency bands 2.4 GHz and 5 GHz, offering excellent utilization of the radio spectrum. The antenna has 9 dBi gain in the 2.4 GHz band and 11 dBi gain in the 5 GHz band, which offers the best performance with a reliable connection. The housing is made of ABS which is a 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.

Features

- Operational in the 2.4 GHz and 5 GHz Wi-Fi bands
- High gain, directional antenna
- MIMO capability for optimum performance
- Robust design for vandal and dust resistance (IP 65)
- Easily mountable on poles

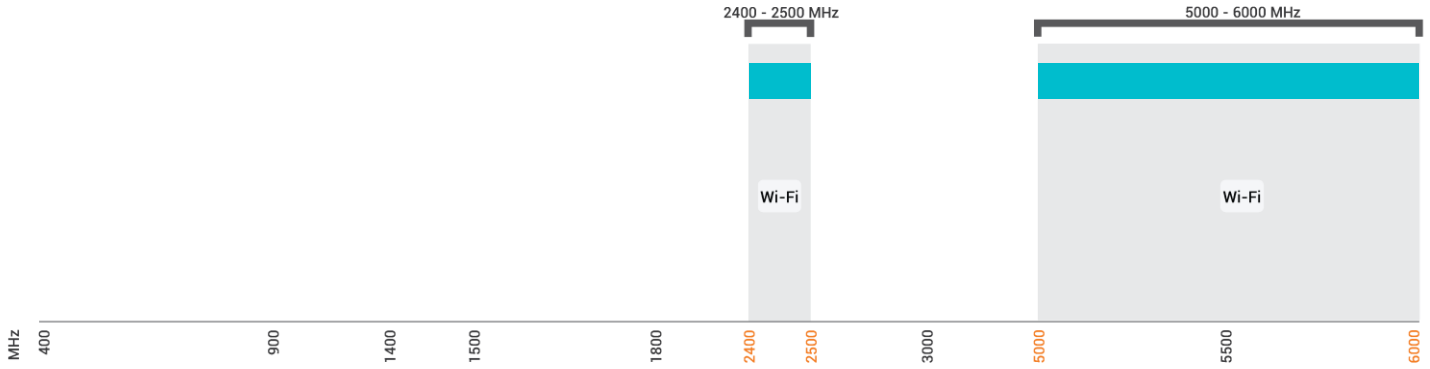
Application Areas

- Offices, warehouses and factories
- Areas with poor data signal reception (indoor or outdoor)
- Open mine areas
- Areas with a lot of radio frequency noise
- M2M and IoT applications




Frequency Bands

The WLAN-61 is a directional antenna that works from | 2400 – 2500 MHz | and | 5000 – 6000 MHz |



Indicates the WI-FI bands on which WLAN-61 works

Antenna Overview

	
Ports	4
SISO / MIMO	4x4 MIMO
Frequency Bands	2400 – 2500 MHz 5000 – 6000 MHz
Polarisation	±45°, horizontal and vertical
Peak Gain	11 dBi
Coax Cable Type	N/A
Coax Cable Length	N/A
Connector Type	SMA (F)

**The connectors are factory mounted to the antenna*

Electrical Specifications

Frequency Bands:	2400 – 2500 MHz 5000 – 6000 MHz
Gain (Max):	9 dBi @ 2400 – 2500 MHz 11 dBi @ 5000 – 6000 MHz
VSWR:	< 2:1
Feed Power Handling:	10 W
Input Impedance:	50 Ohm (nominal)
Polarisation:	±45°, horizontal and vertical
DC Short:	Yes

Product Box Contents

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

Ordering Information

Commercial name:	WLAN-61
Order product code:	A-WLAN-0061-V1
EAN number:	6009710924006

Mechanical Specifications

Product Dimensions	240 mm x 240 mm x 60 mm
Packaged Dimensions:	260 mm x 280 mm x 80 mm
Weight:	0.76 kg
Packaged Weight:	1.334 kg
Radome Material:	ABS (Halogen Free)
Radome Colour:	Pantone – Cool Gray (1C) RAL 7047
Mounting Type:	Wall and Pole Mount

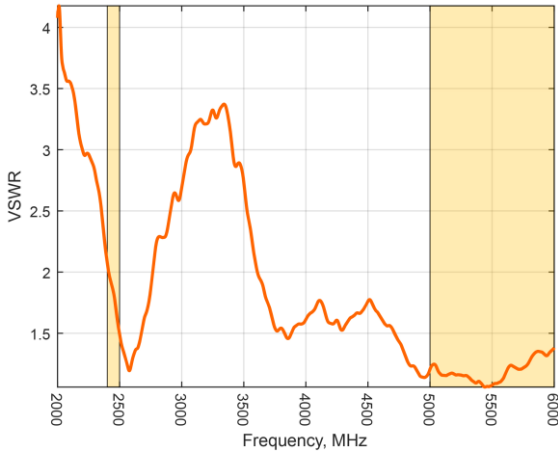
Environmental Specifications, Certification & Approvals

Antenna Wind Survival:	≤160 km/h
Temperature Range (Operating):	-40°C to +80°C
Environmental Conditions:	Outdoor/Indoor
Ingress Protection:	IP 65
Salt Spray:	MIL-STD 810G/ASTM B117
Operating Relative Humidity:	Up to 98%
Storage Humidity:	5% to 95% - non-condensing
Storage Temperature:	-40°C to +80°C
Enclosure Flammability Rating:	UL 94-HB
Impact Resistance:	IK 08
Product Safety & Environmental:	Complies with CE and RoHS standards

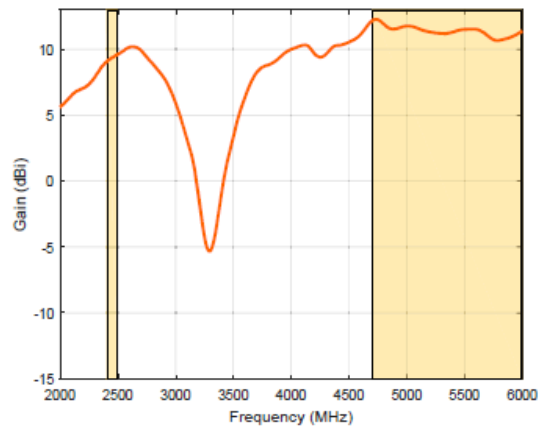


Antenna Performance Plots

VSWR



GAIN (EXCLUDING CABLE LOSS)



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.

The WLAN-61 delivers superior performance across all bands with a VSWR of <2:1.

*VSWR measured without a cable.

Gain* in dBi

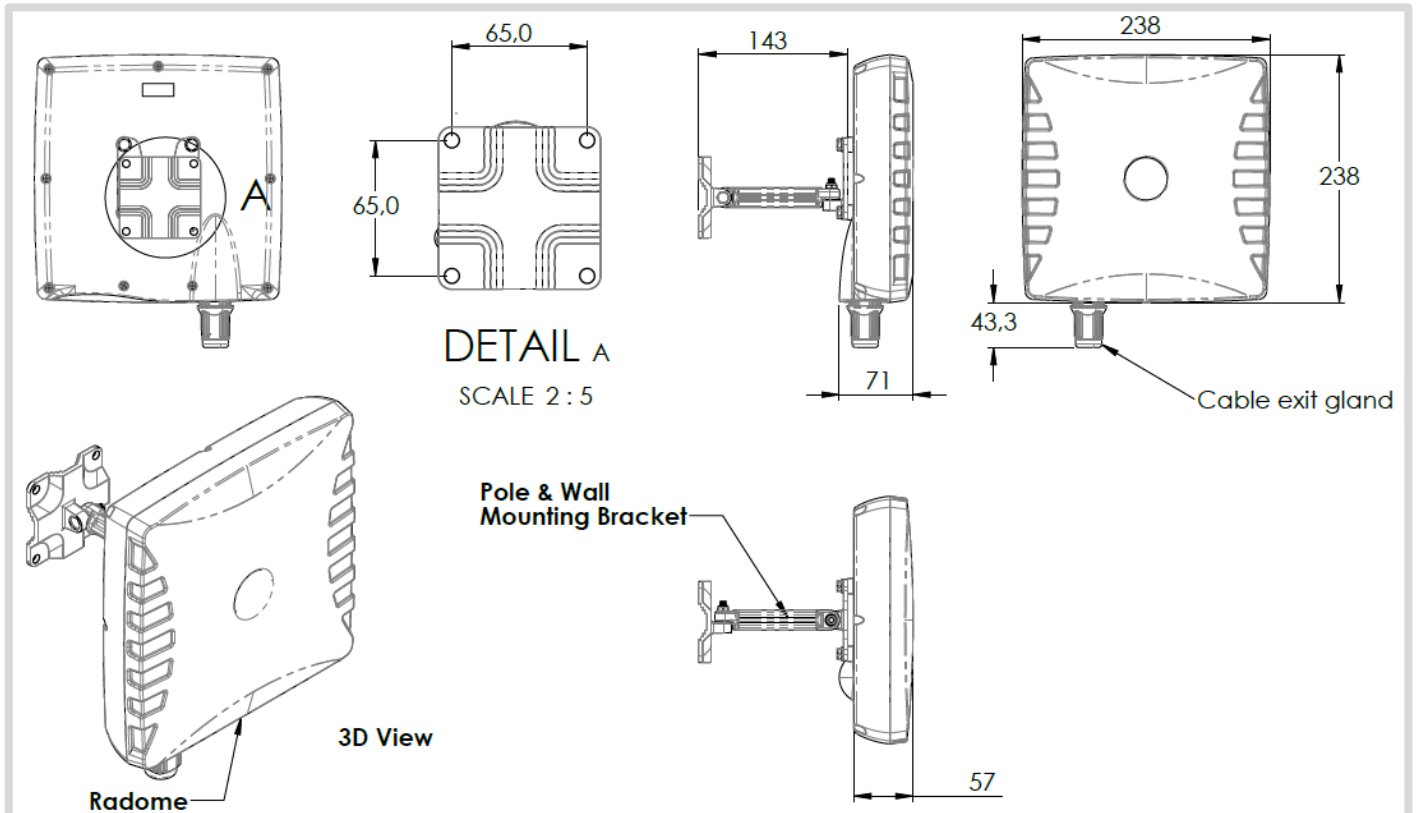
11 dBi is the peak gain across all bands from 2400 – 2500 MHz and 5000 – 6000 MHz

Gain @ 2400 – 2500 MHz: 9 dBi

Gain @ 5000 – 6000 MHz: 11 dBi

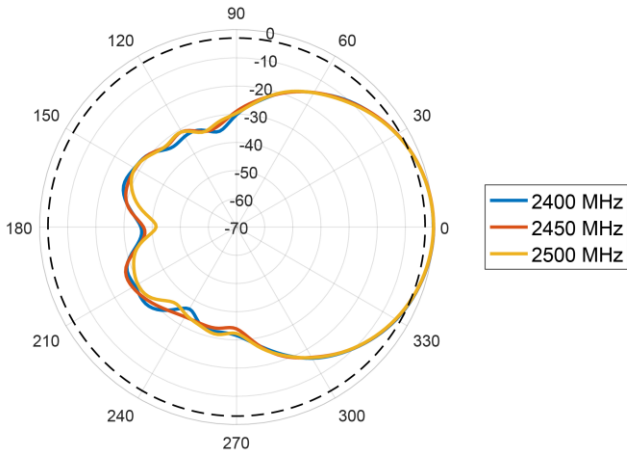
*Antenna gain measured with polarisation aligned standard antenna

Technical Drawings

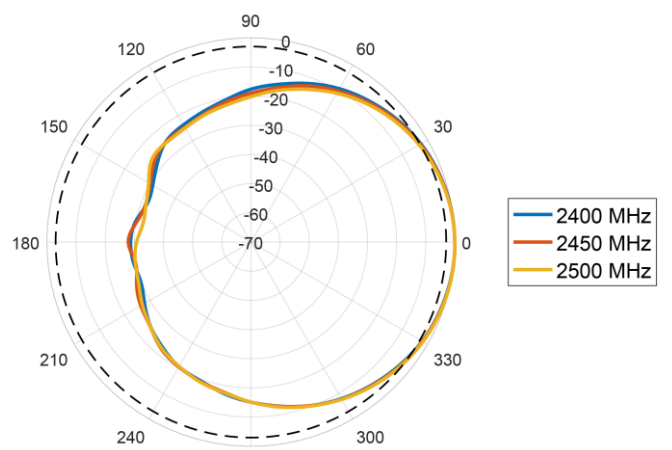


Radiation Patterns

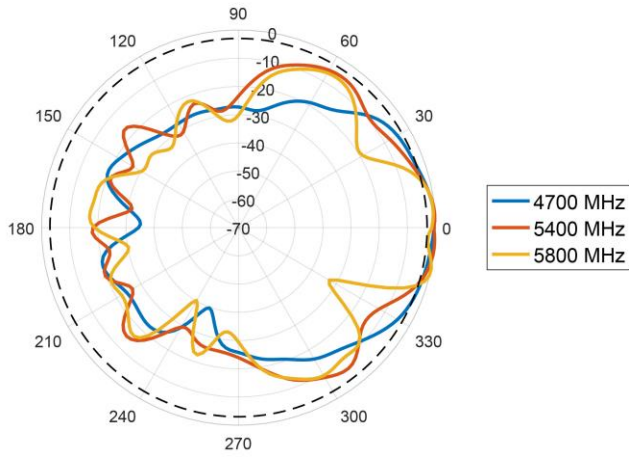
Azimuth: 2400 - 2500 MHz



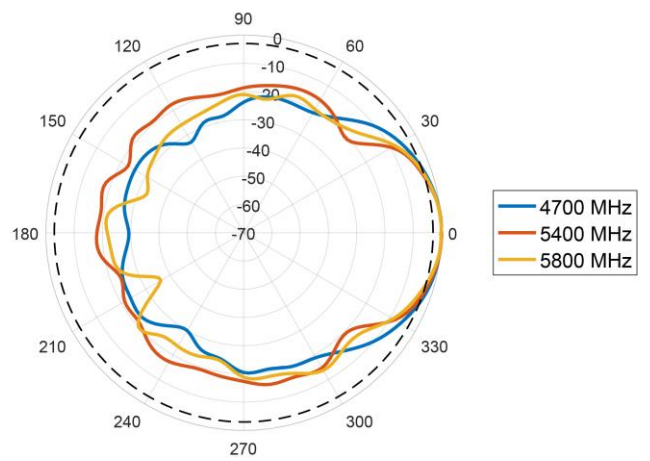
Elevation: 2400 - 2500 MHz



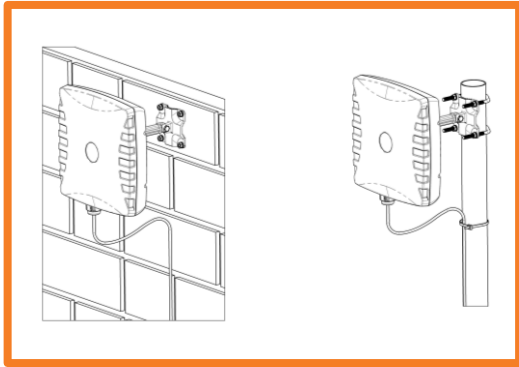
Azimuth: 5000 - 6000 MHz



Elevation: 5000 - 6000 MHz

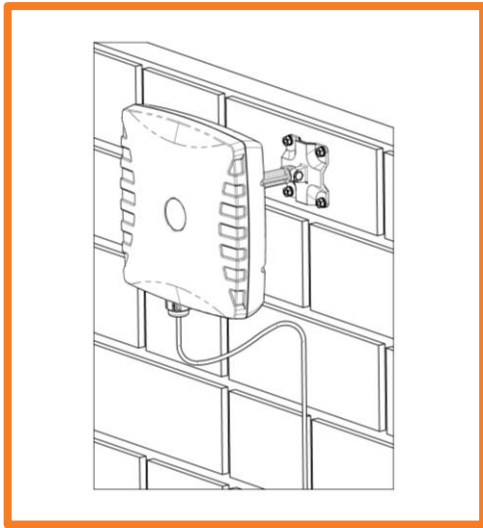


Mounting Options



Pole Mount

Pole/Wall mounting bracket (included)



Wall Mount

Pole/Wall mounting bracket (included)

Additional Accessories

Extension Cables: Up to 15m HDF 195

Various connectors available

Installation poles and brackets available

See accessories technical specifications on www.poynting.tech

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: info@poynting.tech

International Email: sales-global@poynting.tech

Poynting Europe

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

Phone: +49 89 7453 9002

E-mail: sales-europe@poynting.tech

Poynting USA

1804 Owen Court, Suite 104,
Mansfield,
TX 76063
USA

Phone: +1 817 533-8130

E-mail: sales-us@poynting.tech