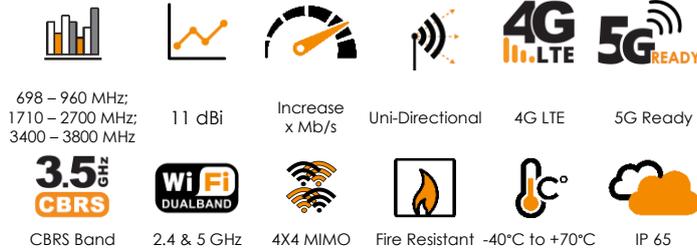


ANTENNAS | EPNT-2 SERIES

X-POLARISED, HIGH GAIN, UNI-DIRECTIONAL 5G/LTE ANTENNA 698 – 960 MHz & 1710 – 3800 MHz, 11 dBi; 4x4 LTE (MIMO), 2x2 Wi-Fi (MIMO)



- **Antenna enclosure with high performance antennas**
- **New advanced metamaterial technology**
- **Exceptional high gain performance over the main 4G/5G bands**
- **2x2 MIMO dual-band 2.4 GHz and 5 GHz Wi-Fi antennas**
- **Cross polarised antennas for improved performance**
- **IP65 weather/dust and vandal resistant enclosure**

Product Overview

Poynting Antennas introduces its all-new antenna enclosure range, the ePoynt series. The ePoynt enclosures are designed to fit a variety of router modules, transforming the antenna enclosure into a Customer Premises Equipment (CPE) – just add your own LTE/5G router. The ePoynt enclosure can accommodate routers up to the size of 185 x 145 x 45 mm³. The ePoynt-2 (EPNT-2) antenna enclosure uses our world renowned Artificial Magnetic Conductor (AMC) technology from our XPOL-2-5G antenna. Providing a cross-polarised, high gain, uni-directional antenna that offers wideband coverage from 698 to 960 MHz and 1710 to 3800 MHz, making it ideal for LTE & 5G implementations.

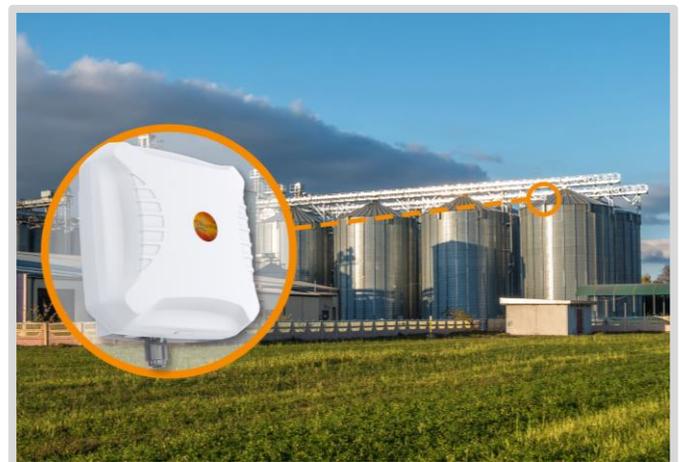
The EPNT-2 contains four cross-polarised cellular antennas, with two uni-directional antennas offering a peak gain of 11 dBi and two omni-directional antennas with a peak gain of 5 dBi. Making it ideal for 4x4 MIMO or dual 2x2 MIMO routers. The EPNT-2 also includes two omni-directional dual-band Wi-Fi antennas that cover the 2.4 GHz and 5 to 6 GHz Wi-Fi bands for 2x2 MIMO. The combination of our uni-directional XPOL-2-5G antenna with a world class router delivers exceptional performance along with increased data throughput. The EPNT-2 enclosure was also designed to withstand adverse weather condition, making the antenna weatherproof and waterproof with an IP65 rating.

Features

- Ultra-wideband coverage for 2G, 3G, 4G and 5G
- High gain directional antenna, with a peak gain of 11 dBi
- 2x2 MIMO High gain directional antennas
- Wall, pole, and window mountable
- Weatherproof and waterproof enclosure (IP65)
- 1 x External USB ports, 1 x Ethernet port and 2 x External SMA connections for additional antennas

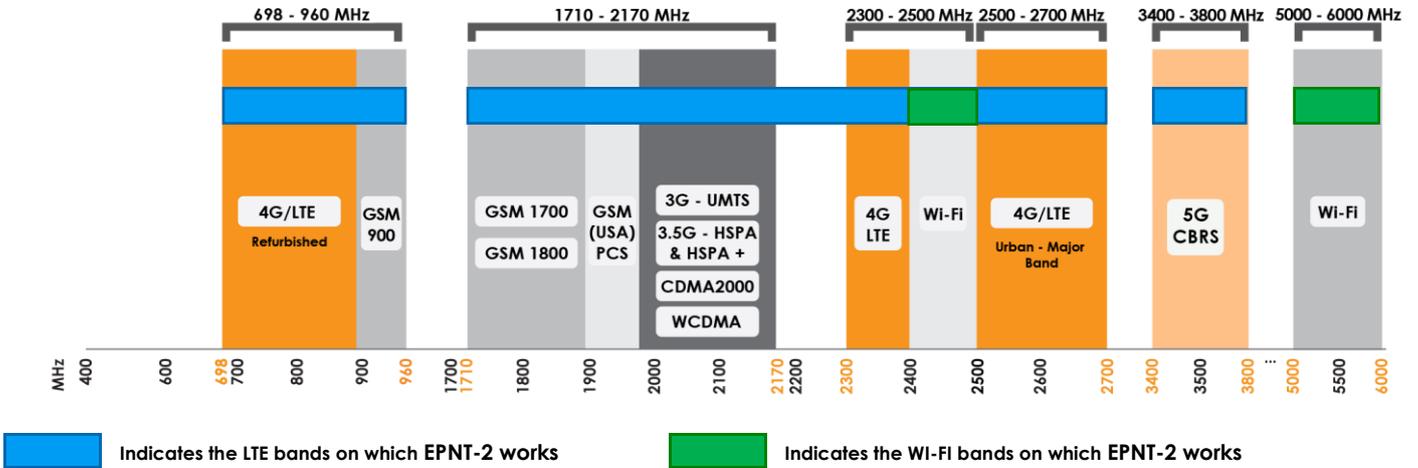
Application Areas

- Outdoor antenna for Fixed Wireless Access (FWA)
- Consumer LTE/G internet connectivity
- Industrial and commercial LTE/G deployment
- Urban and rural household reception enhancement
- Agricultural and farming LTE/G data distribution



Frequency Bands

The EPNT-2 is a CPE antenna that works from 698 – 960 MHz | 1710 – 2700 MHz | 3400 – 3800 MHz and the following Wi-Fi frequency bands | 2400 - 2500 MHz | 5000 - 6000 MHz



Antenna Overview

		
Ports	Cell 1 & Cell 2* Main Cell 1 & Cell 2* Aux/Div	1 & 2
SISO / MIMO	4x4 MIMO	2x2 MIMO
Frequency Bands	698 - 3800MHz	2400 – 2500 MHz 5000 - 6000 MHz
Peak Gain	11 dBi	7 dBi
Connector Type	SMA (F)	SMA (F)

*The connectors are factory mounted to the antenna

* Cell 2 offers two Omni directional antennas for diversity and 4 x 4 MIMO functionality.

Electrical Specifications - Cellular

Frequency bands:	698 - 960 MHz 1710 - 2700 MHz 3400 - 3800 MHz
Gain (max) Port 1 & 2:	8.5 dBi @ 698 - 960 MHz 9 dBi @ 1710 - 2700 MHz 11 dBi @ 3400 - 3800 MHz
VSWR Port 1 & 2:	< 2:1 over 90% of the band
Feed power handling:	20 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Cell 1: ±45° Cell 2: Omni directional

Electrical Specifications - Wi-Fi

Frequency:	2400 - 2500 MHz 5000 - 6000 MHz
Gain (Max):	3 dBi @ 2400 - 2500 MHz 7 dBi @ 5000 - 6000 MHz
VSWR:	< 2.5:1 over 90% of the band
Feed power handling:	10 W
Nominal input impedance:	50 Ohm (nominal)
Polarisation:	2 x Vertical linear
Path to Ground:	Yes

Product Box Contents

Antenna:	A-EPNT-0002-V1-01
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Ordering Information

Commercial name:	EPNT-2
Order product code:	A-EPNT-0002-V1-01
EAN number:	6009710922019

Mechanical Specifications

Product dimensions	260mm x 264mm x 168mm
Packaged dimensions:	410mm x 280mm x 177mm
Weight:	1.468 kg
Packaged weight:	2.338 kg
Radome material:	UV stable ASA
Radome colour:	Pantone P 179-1C
Mounting Type:	Wall/Pole and Window Mounted

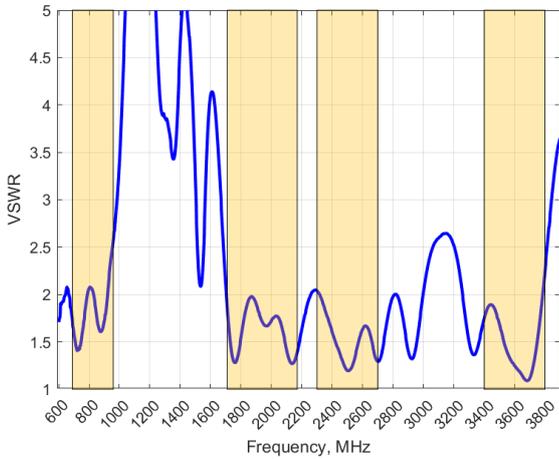
Environmental Specifications, Certification & Approvals

Wind Survival:	≤220 km/h
Temperature Range (Operating)*:	-40°C to +70°C
Environmental Conditions:	Outdoor/Indoor
Water ingress protection ratio/standard:	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 +70°C
Enclosure Flammability Rating:	UL 94-HB
Impact resistance:	IK 08
Product Safety & Environmental:	Complies with CE and RoHS standards

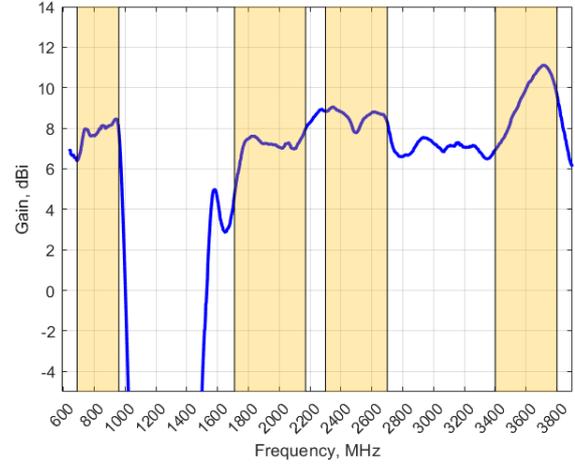
*Routers/Router boards have their own operating temperatures as provided in their individual data sheets. Routers/router boards mounted within an EPNT-2 which is exposed to solar radiation will operate at 10-12°C above ambient temperature. Please take this into consideration and select your device to be used with the EPNT-2 accordingly.

Antenna Performance Plots -Cellular

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 EPNT-2 delivers superior performance across all bands with a VSWR of 2:1 or better across 90% of the bands.

*Antenna VSWR measured without a cable

Gain* in dBi

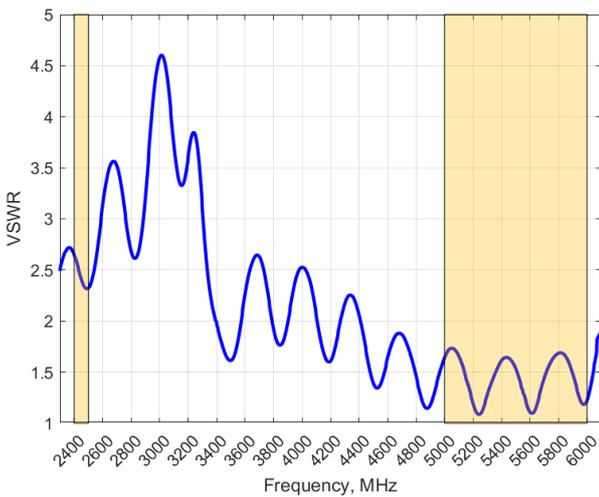
11 dBi is the peak gain across all bands from 698 - 3800 MHz

Gain @ 698 – 960 MHz:	8.5 dBi
Gain @ 1710 – 2700 MHz:	9 dBi
Gain @ 3400 – 3800 MHz:	11 dBi

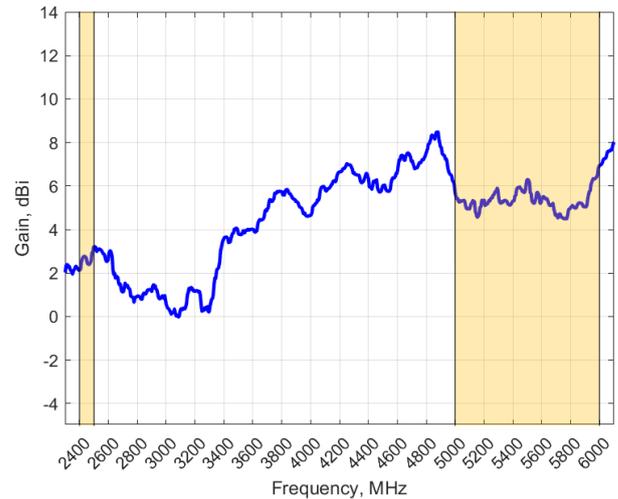
*Antenna gain measured with polarisation aligned standard antenna

Antenna Performance Plots -Wi-Fi

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 EPNT-2 Wi-Fi antenna delivers superior performance across all bands with a VSWR of ≤ 2.5:1 over 90% of the bands.

*Antenna VSWR measured without a cable

Gain* in dBi

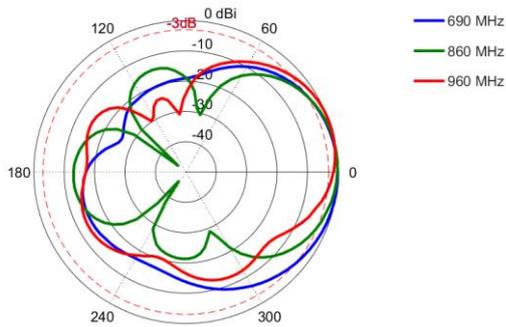
7 dBi is the peak gain across all bands from 2400 – 2500 MHz & 5000 – 6000 MHz

Gain @ 2400-2500 MHz:	3 dBi
Gain @ 5000-6000 MHz:	7 dBi

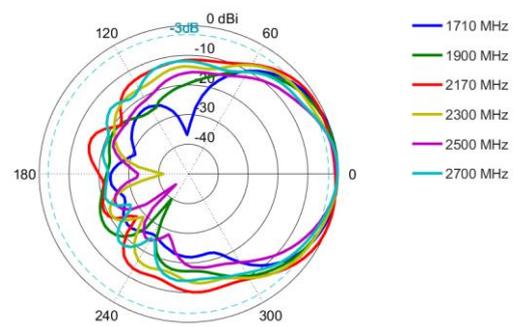
*Antenna gain measured with polarisation aligned standard antenna

Radiation Patterns- Cellular

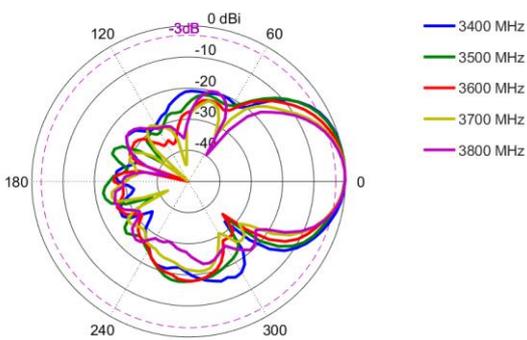
Azimuth: 690 – 960 MHz



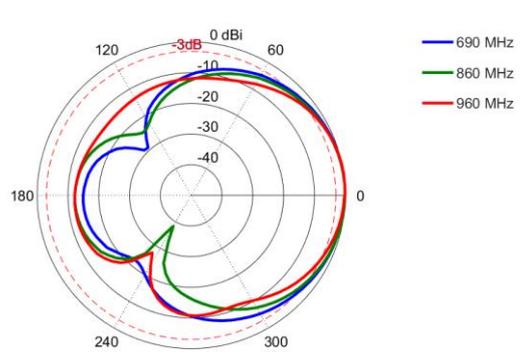
Azimuth: 1710 – 2700 MHz



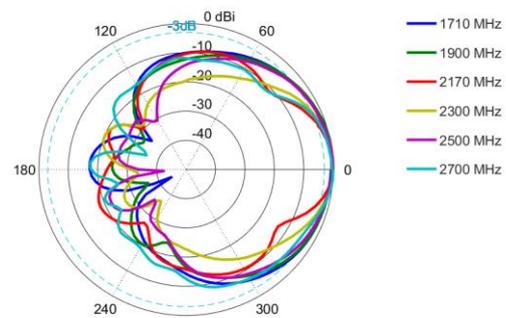
Azimuth: 3400 – 3800 MHz



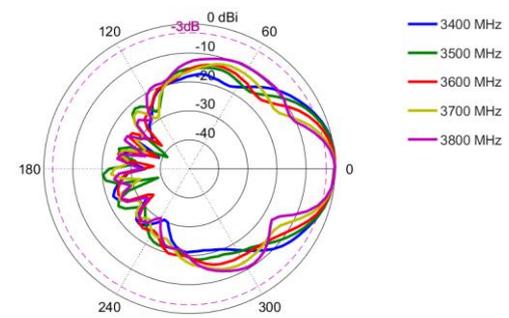
Elevation: 690 – 960 MHz



Elevation: 1710 – 2700 MHz

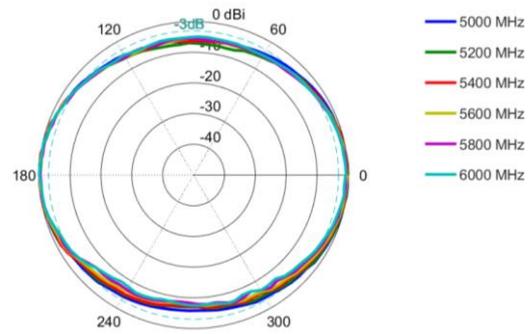
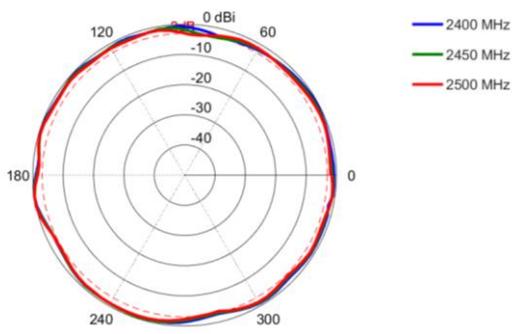


Elevation: 3400 – 3800 MHz

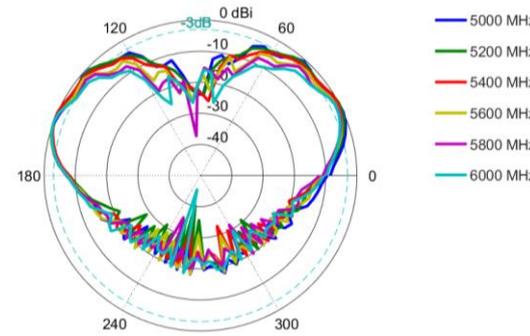
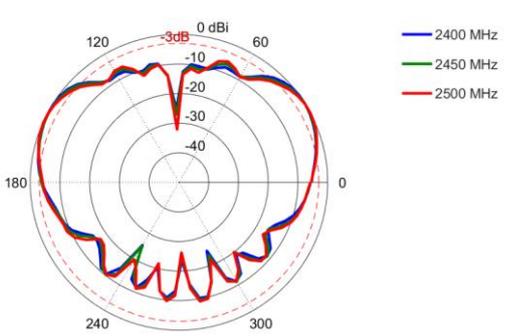


Radiation Patterns- Wi-Fi

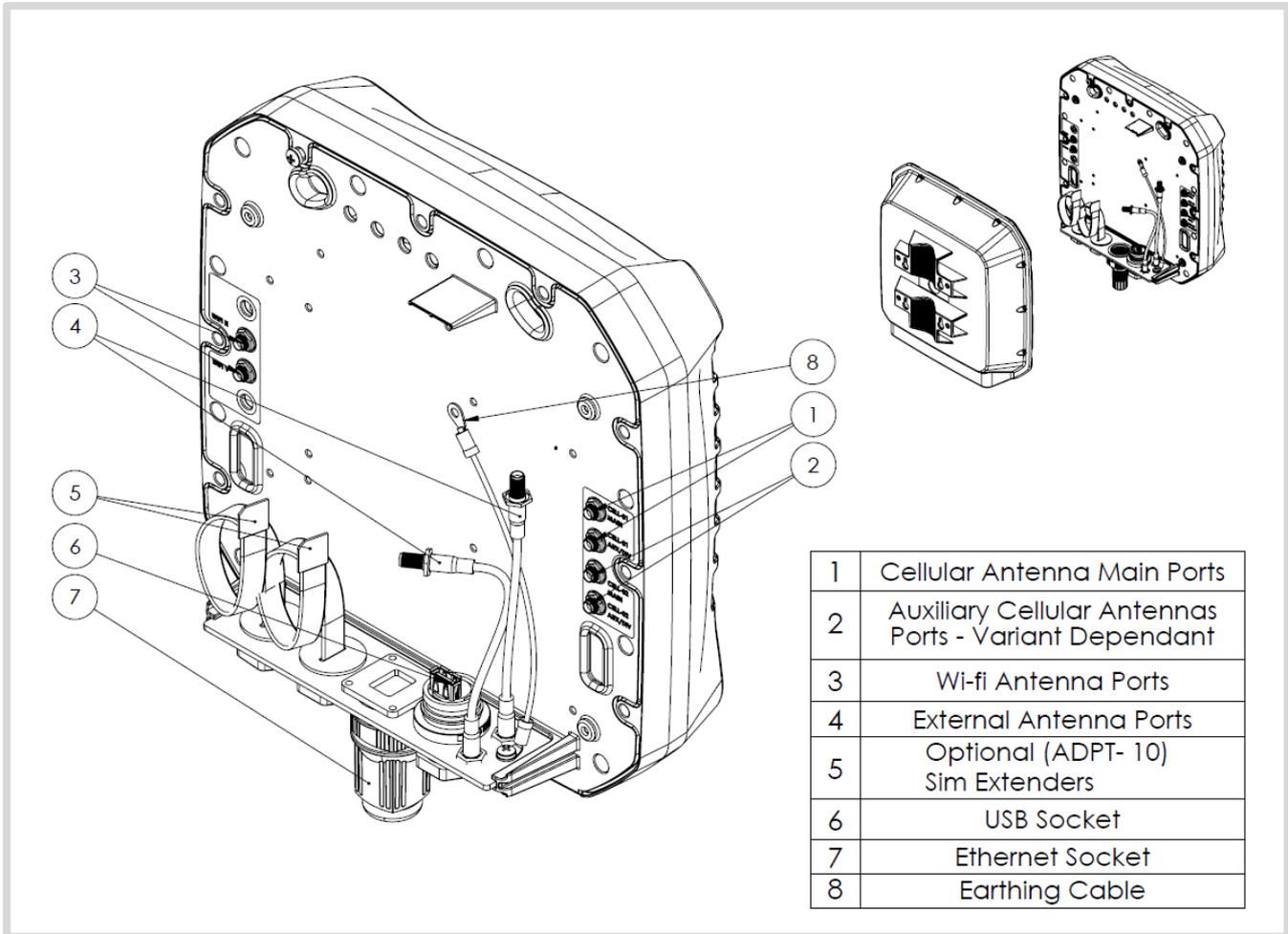
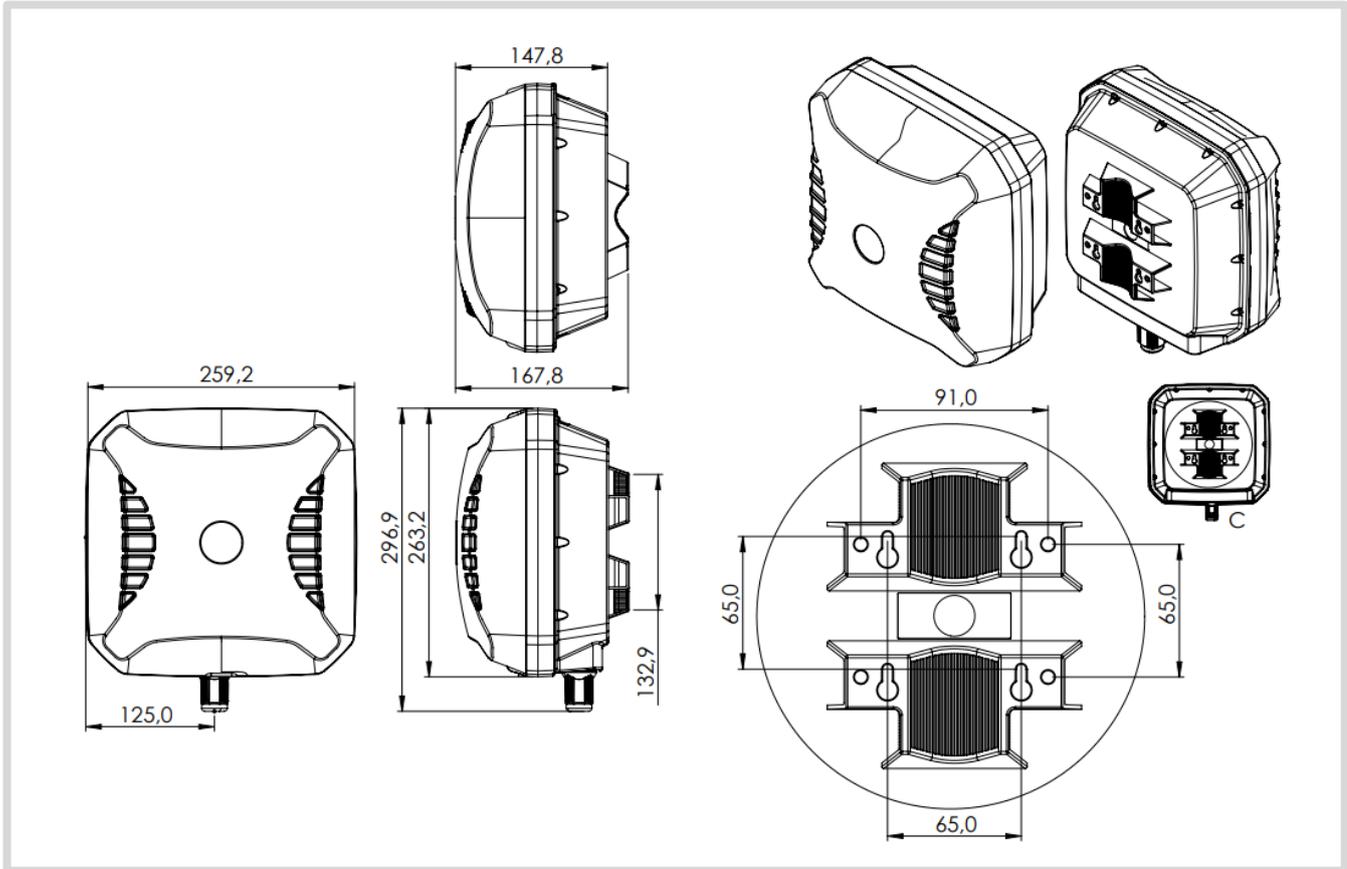
Azimuth: 2400 – 2500 MHz **Azimuth: 5000 – 6000 MHz**



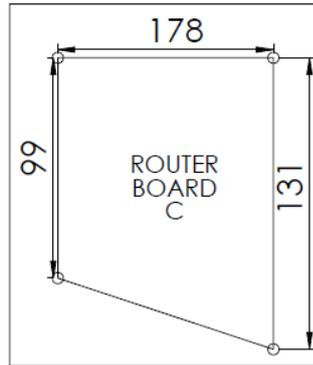
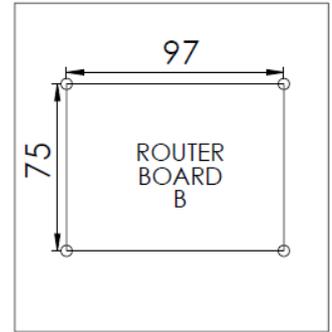
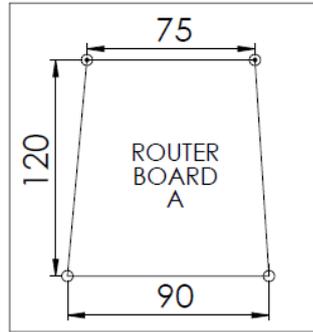
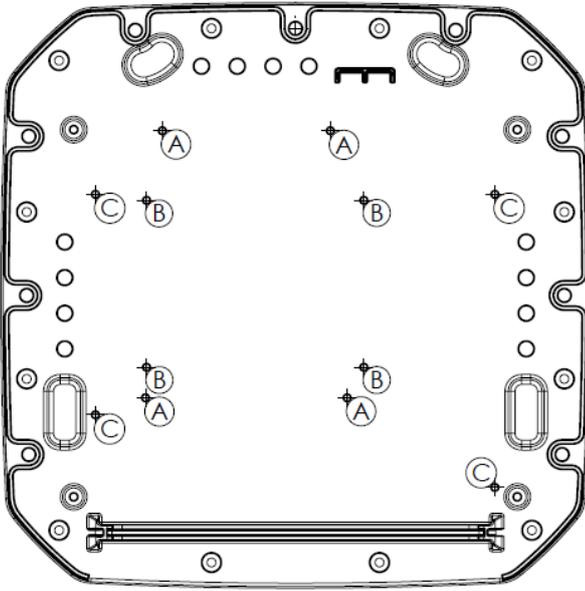
Elevation: 2400 – 2500 MHz **Elevation: 5000 – 6000 MHz**



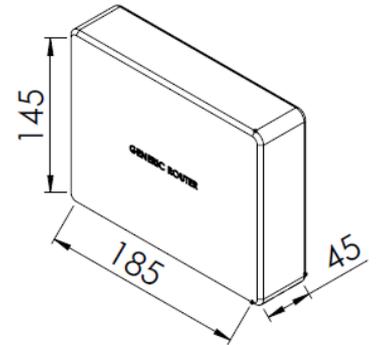
Technical Drawings



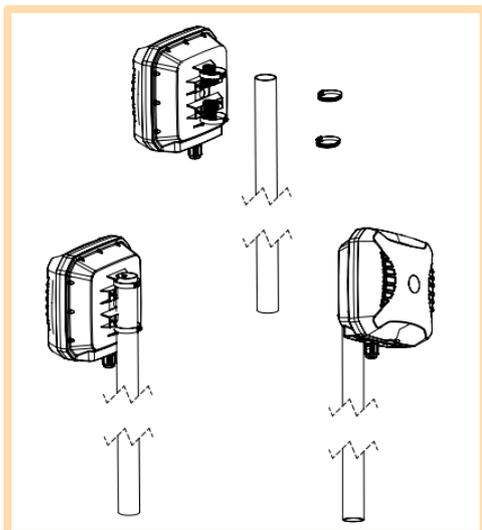
GENERIC ROUTER
MOUNTING HOLES SPACING



AVAILABLE SPACE
FOR COMPATIBLE
ROUTER
ENCLOSURE

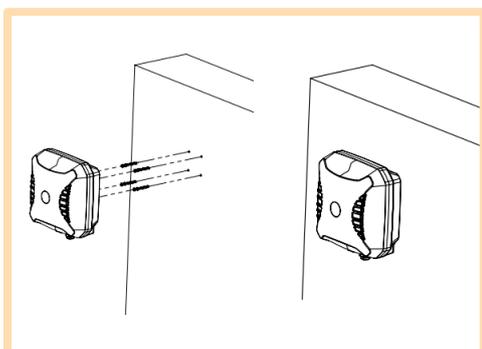


Mounting Options



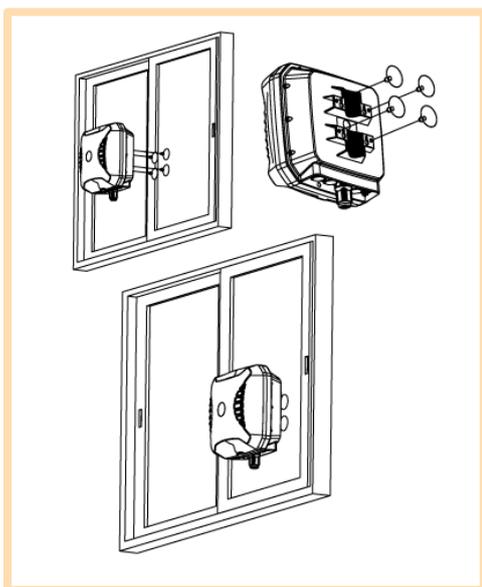
Pole Mount

Pole/Wall mounting bracket used pipe clamps (included)



Wall Mount

Pole/Wall mounting bracket used with knock-in screws (included)



Window Mount*

Pole/Wall mounting bracket used with window suckers (included)

** Window mounting using suckers is a temporary solution provided for convenience. Ensure that the grounding cable used is strong enough to double as a safety fallback. For sturdier long-term mounting, consider the wall/pole mount options.*

Additional Accessories



A-ADPT-010

SIM Extender



Various fly leads/pigtails available

- A-CAB-156: 250mm RG178 MCX (M) to RA SMA (M) Cable Assembly
- A-CAB-157: 250mm RG178 MMCX (M) to RA SMA (M) Cable Assembly
- A-CAB-158: 250mm RG178 U.FL (M) to RA SMA (M) Cable Assembly
- A-CAB-159: 250mm RG178 RA SMA (M) to RA SMA (M) Cable Assembly
- A-CAB-160: 250mm RG178 RA RPSMA (M) to RA SMA (M) Cable Assembly

Contact Poynting

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