# **POYNTING** BEYOND A CONNECTED LIFE



## EPNT-4, 4x4 MIMO Antenna Enclosure | Commercial Applications

## **KEY FEATURES**

- Self-contained omni-directional LTE/5G enclosure that integrates both antenna and customer router within an outdoor enclosure
- Can accommodate routers up to the size of 120 mm x 120 mm x 50 mm
- Wideband frequency coverage for LTE/5G from 617 to 4200 MHz
- Cellular antennas with a peak of 3dBi
- Dual-band Wi-Fi antennas with a peak of **5dBi**
- Cross-polarised and **4x4 MIMO** for improved throughput
- Works on all cellular networks across the world, including **Band 71 (617 to 698 MHz)**
- Covers the CBRS Band from **3.5 to 4.2 GHz**
- UV Stable ASA plastic enclosure ensures UV stable and chemical protected enclosure
- Water & dust resistant enclosure (IP67)
- Versatile bracket design for easy and simple installation for pole / wall mounting
- Antenna can withstand winds up to 160 km/h
- DC grounded to prevent static build-up discharge

## **KEY APPLICATION AREAS**

- Designed for commercial, industrial, residential, and urban applications, where reliable LTE/5G reception is required
- Ideal for Fixed Wireless Access (FWA) where an outdoor antenna is required for housing CPE electronics in one easy deploy solution
- Marine applications, such as ferries, private yachts, and towing vessels.
- Smart Environmental, Water Systems and Utilities M2M & IoT
- Farming & Agricultural M2M & IoT
- Oil & Gas communication systems
- Municipal & Government systems
- Other applications with harsh environments such as harbour buildings, buoys, pontoons, and smaller boats

Poynting Antennas (Pty) Ltd Registration Number: 2000/026835/07 VAT Number: 4900192768

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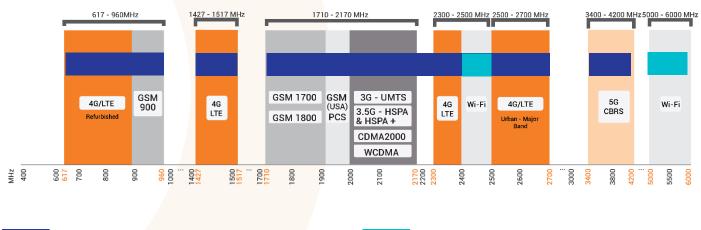
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## **Product Overview**

Poynting introduces its all-new ePoynt-4 antenna to the existing enclosure range, known as 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. Poynting's new EPNT-4 antenna enclosure consistent of multiple omni-directional antennas.

The ePoynt-4 includes up to four cross-polarised cellular antennas, which are cross-polarised, making it ideal for 4x4 MIMO or dual 2x2 MIMO routers. The 4x4 MIMO delivers enhanced performance in built-up areas where there are several base stations close by, but where higher stability and throughput is required. The antennas offer wideband coverage from 617 – 4200 MHz, with a peak gain of 3dBi, making it ideal for LTE & 5G implementation. The antenna also includes up to four cross-polarised dual-band Wi-Fi antennas, that cover the 2.4 GHz and 5 to 6 GHz W-Fi bands for 4x4 MIMO or dual 2x2 MIMO. The frequency bands supported by the antenna are illustrated in the following graph.



Indicates the LTE/5G bands on which EPNT-4 works

Indicates the Wi-Fi bands on which EPNT-4 works

The antenna configuration in the EPNT-4 includes multiple cellular and Wi-Fi antennas for MIMO, which are cross-polarised for improved diversity and decorrelated from an RF perspective. This helps to improve signal fading, improves link stability, and enhances throughput on the system. The 4x4 antenna can be used in dual 2x2 MIMO configuration where two radio modules are implemented, either for hardware redundancy or for binding different networks for superior link availability. With the launch of the EPNT-4 the following derivatives will be available.

Product Code	Number of Antenna Ports		
	Cellular (LTE/5G)	Wi-Fi	GPS
A-EPNT-0004-V1-15	2	2	1
A-EPNT-0004-V1-17	4	2	1
A-EPNT-0004-V1-19	4	4	1

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The installation of a customer router within the enclosure has been made easy and simple. A unique cradle design is included, which will allow for routers of varying sizes to be installed within the EPNT-4. The enclosure will be able accommodate routers with dimensions of up to 120 mm x 120 mm x 50 mm, which will give adequate space to install the router of their choice. The installation of a router within the EPNT-4 is illustrated in Figure 1.

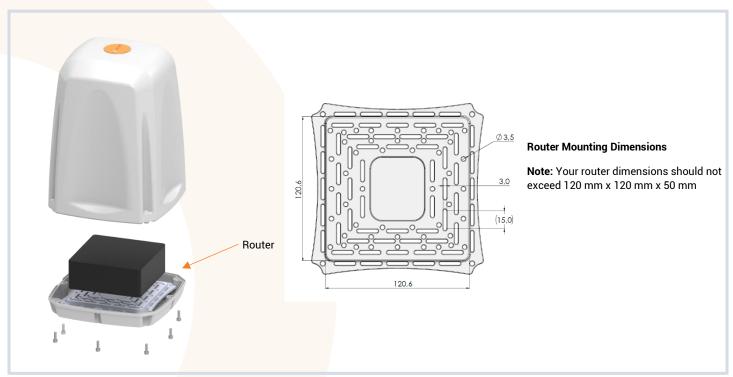


Figure 1: EPNT-4 antenna paired with customer router

The combination of the EPNT-4 antenna with the customer supplied router within an integrated enclosure results in ultra-low losses between the router and the antenna due to the short cable runs. Meaning that the maximum RF signal is transferred between the network base station and the router. This will result in maximum throughput, with lower radio signal fading, and enhanced connection reliability. The combination of the external antenna with the customer supplied router within an integrated enclosure results in a self-contained unit.

The radiation patterns of the EPNT-4 antenna enclosure are exceptionally well controlled, further enhancing the performance of the router. This is an important factor for a stable connection on LTE and future 5G cellular technologies, where they rely on capacity enhancing features such as carrier aggregation to provide the best possible reception over multiple frequency bands.

The EPNT-4 comes in an all-new radome design, with an overall size of 351 mm x 238 mm x 182 mm, including the bracket. The radome offers a rugged design with an IP67 ingress protection rating, making the antenna weatherproof and waterproof. This makes the antenna suitable for outdoor mounting and ensuring that the antenna will be able to withstand harsh environmental conditions. The UV stable ASA

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radome material offers protection against highly corrosive environments, which includes chemical and toxic environments.

The antenna enclosure comes standard with a mounting bracket and knock-in screws that can be used for a variety of mounting options. The antenna can be wall or pole mounted to be used as an outdoor antenna for easy installation. The antenna complies with the relevant CE and RoHS standards as stated in our technical sheets. The antenna is also rated for temperatures from -40°C to +80°C and will survive winds of up to 160 km/h with an impact resistance rating of IK10.

Poynting is well known for developing future proof antennas and the all new EPNT-4 antenna is no different. We plan to release the new antenna at the beginning of October 2022, with all the related specifications and information available at the launch. The EPNT-4 will be open for orders from October 2022. Keep an eye out for the launch of the new EPNT-4 antenna and experience the connected life.



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## **Mounting Options**



### Pole Mount

Pole/Wall mounting bracket used with U-bolts (included)



#### Wall Mount

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



#### Surface Mount

Surface mounting using a surface mount gasket (included)

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#### **Marine Mount**

Marine mounting using optional marine bracket (BRKT-038) and MISC-103 kit (not included)

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