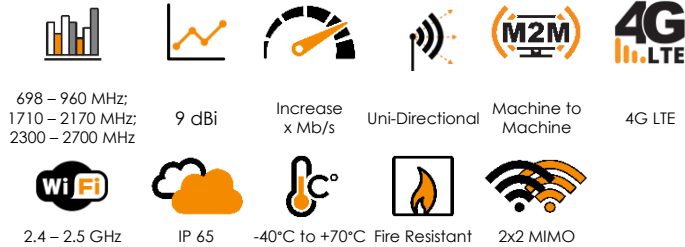


**ANTENNAS | XPOL-2 SERIES**

## X-POLARISED, HIGH GAIN, DIRECTIONAL LTE ANTENNA

LTE 2X2 MIMO; 698 - 2700 MHz, 9 dBi



- **Futureproof directional wideband LTE and Wi-Fi antenna**
- **Backwards compatible with 3G and 2G technologies**
- **Two antennas in one enclosure for optimal LTE performance**
- **Improves mobile network subscriber's user experience**
- **Increased connectivity stability**
- **Weather- and vandal resistant enclosure (IP 65)**



### Product Overview

The XPOL-2 provides an innovative solution for 4G/3G and 2G networks, including Wi-Fi. The XPOL-2 is a dual-polarised full LTE band antenna and is wall- or pole-mountable. The antenna is equipped to provide client-side MIMO and diversity support for the networks of today and tomorrow by incorporating two separately fed ultra-wideband elements in a single housing. This is a cost-effective solution for enhancing signal reception and throughput. The XPOL-2 antenna increases signal reliability, ensures higher data throughput for users and provides a stable, high quality connection. This improves subscriber's user experience and secures client retention. It is ideal for any application using the GSM network (LTE/ HSPA/3G/EDGE/GPRS).

### Features

- Wideband frequency ranges from 698 – 2700 MHz
- Also covers Wi-Fi for 2400 – 2500 MHz
- High gain directional antenna
- Two cross-polarised antennas in one enclosure; offering MIMO capability
- Wall or pole mountable
- Lightweight

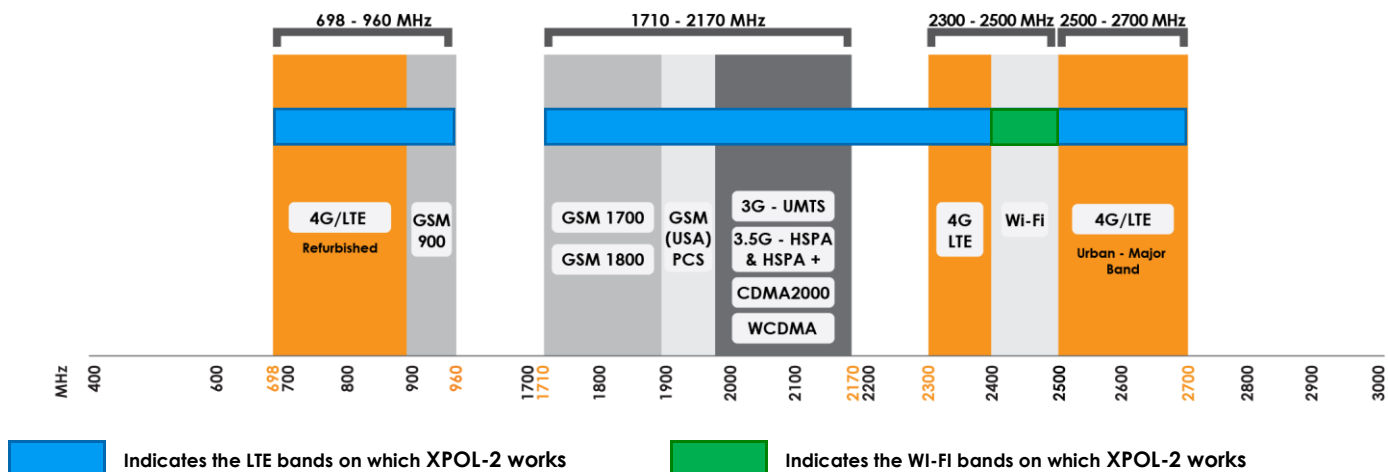
### Application Areas

- Urban and rural areas
- Poor data signal reception (Indoor or outdoor)
- Slow data transmission connectivity
- Unstable connection
- Increase system transmission reliability
- LTE fringe areas (close to an LTE area, but just out of reach)
- Network operator flexibility – as the antennas are wideband, a new antenna is not needed per network operator – works on most networks



### Frequency Bands

The XPOL-2 is a directional antenna that works from 698 – 960 MHz | 1710 – 2170 MHz | 2300 – 2700 MHz



### Antenna Overview

Ports	2
SISO / MIMO	2x2 MIMO
Frequency Bands	698 – 2700 MHz
Polarisation	0° and 90°
Peak Gain	9 dBi
Coax Cable Type	Twin HDF 195
Coax Cable Length	5m
Connector Type	SMA (M)

\*The coax cable & connector are factory mounted to the antenna

## Electrical Specifications

<b>Frequency bands:</b>	698 – 960 MHz 1710 – 2170 MHz 2300 – 2700 MHz
<b>Gain (max):</b>	8 dBi @ 698-960 MHz 6.5 dBi @ 1710-2170 MHz 9 dBi @ 2300-2700 MHz
<b>VSWR:</b>	≤ 2:1 over 90% of the band
<b>Feed power handling:</b>	10 W
<b>Input impedance:</b>	50 Ohm (nominal)
<b>Polarisation:</b>	0° and 90°
<b>Coax cable loss:</b>	0.385 dB/m @ 900 MHz 0.565 dB/m @ 1800 MHz 0.666 dB/m @ 2400 MHz
<b>DC short:</b>	Yes

## Product Box Contents

<b>Antenna:</b>	A-XPOL-0002-V2
<b>Mounting bracket:</b>	1x Z-shaped mounting bracket suitable for wall or pole mount

## Ordering Information

<b>Commercial name:</b>	XPOL-2
<b>Order product code:</b>	A-XPOL-0002-V2
<b>EAN number:</b>	6009693810051

## Mechanical Specifications

<b>Product dimensions</b>	290 mm x 265 mm x 155 mm
<b>Packaged dimensions:</b>	375 mm x 270 mm x 100 mm
<b>Weight:</b>	1.55 kg
<b>Packaged weight:</b>	1.98 kg
<b>Radome material:</b>	ABS (Halogen Free)
<b>Radome colour:</b>	Pantone – Cool Gray (1C) RAL 7047
<b>Mounting Type:</b>	Wall and pole mount

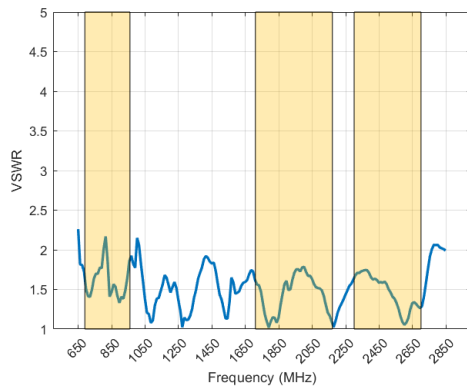
## Environmental Specifications, Certification & Approvals

<b>Wind Survival:</b>	<120 km/h
<b>Temperature Range (Operating):</b>	-40°C to +70°C
<b>Environmental Conditions:</b>	Outdoor/Indoor
<b>Water ingress protection ratio/standard:</b>	IP 65 (NEMA 4X)
<b>Salt Spray:</b>	MIL-STD 810F/ASTM B117
<b>Operating Relative Humidity:</b>	Up to 98%
<b>Storage Humidity:</b>	5% to 95% - non-condensing
<b>Storage Temperature:</b>	-40°C to +70°C
<b>Enclosure Flammability Rating:</b>	UL 94-HB
<b>Impact resistance:</b>	IK 08
<b>Product Safety &amp; Environmental:</b>	Complies with CE and RoHS standards

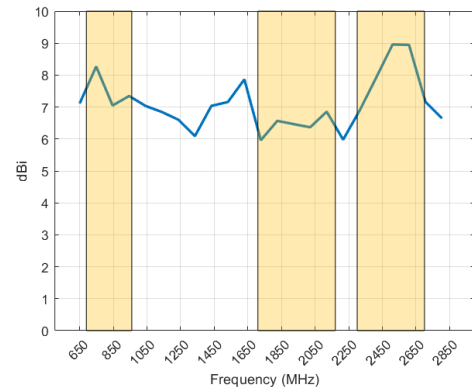


**Antenna Performance Plots**

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

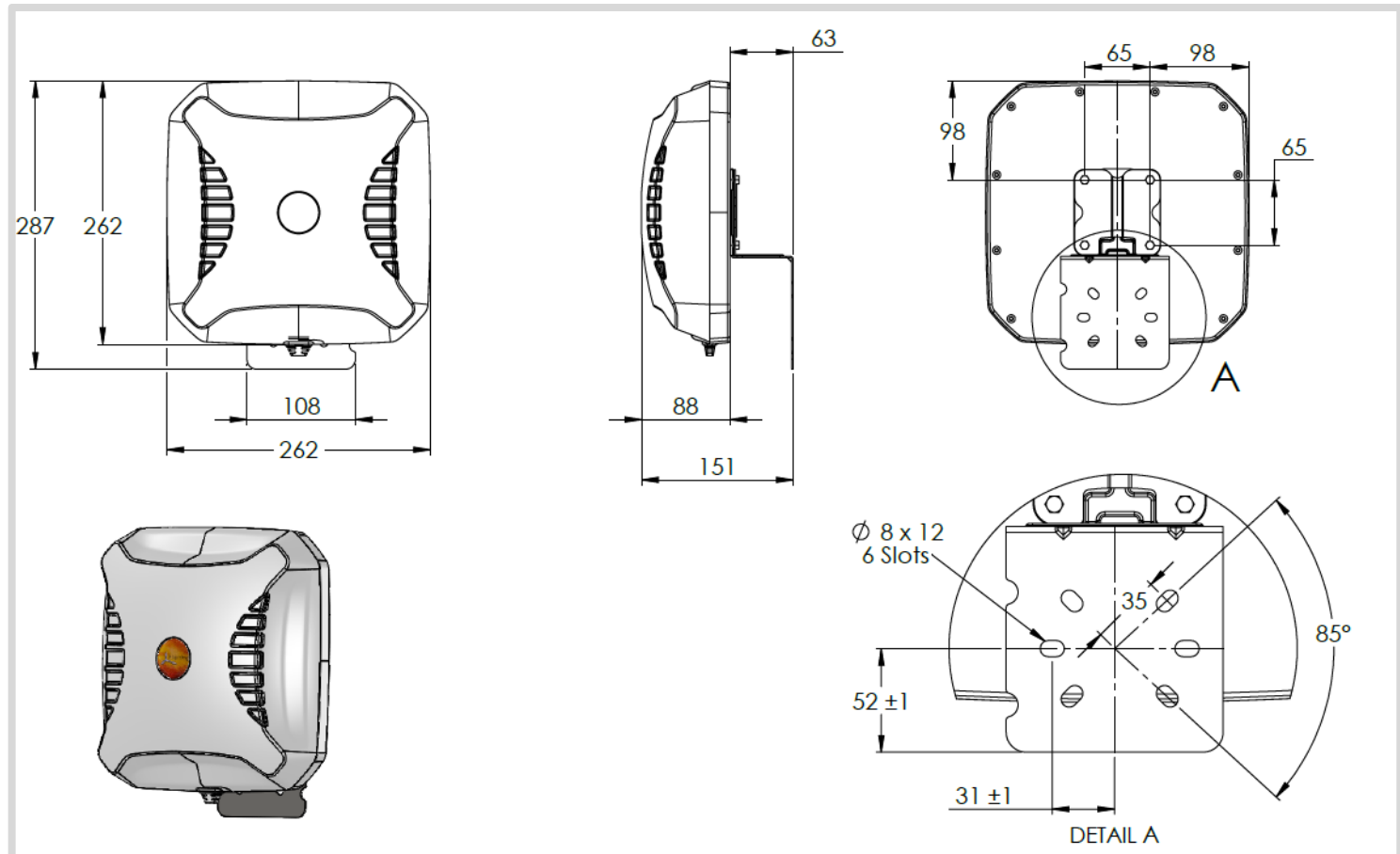
**Gain\* in dBi**

8 dBi is the peak gain across all bands from 698 – 2700 MHz

Gain @ 698 – 960 MHz:	8 dBi
Gain @ 1710 – 2170 MHz:	6.5 dBi
Gain @ 2300 – 2700 MHz:	9 dBi

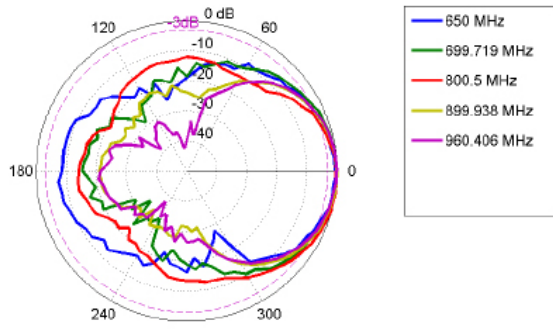
*\*Antenna gain measured with polarisation aligned standard antenna*

**Technical Drawings**

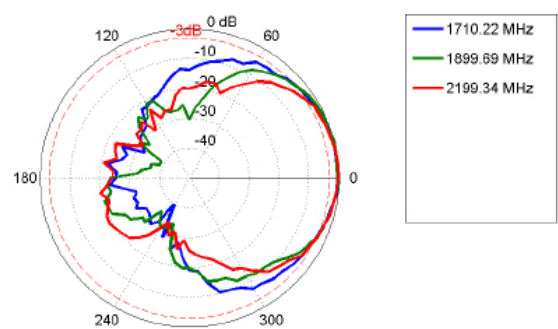


**Radiation Patterns**

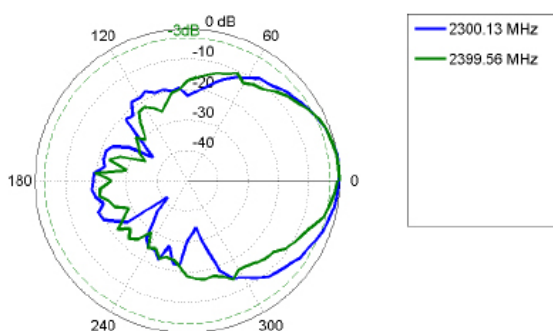
Azimuth: 698 – 960 MHz



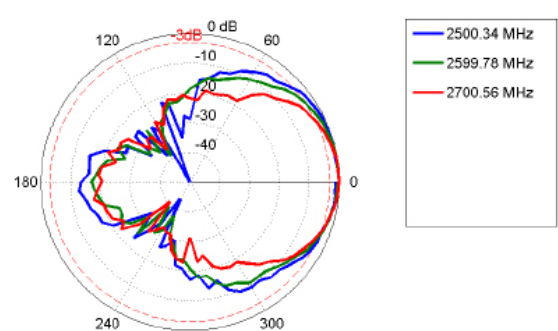
Azimuth: 1710 – 2170 MHz



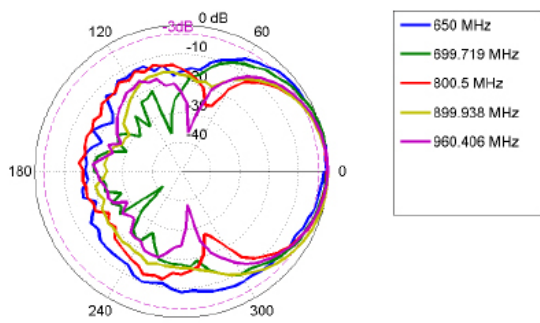
Azimuth: 2300 – 2400 MHz



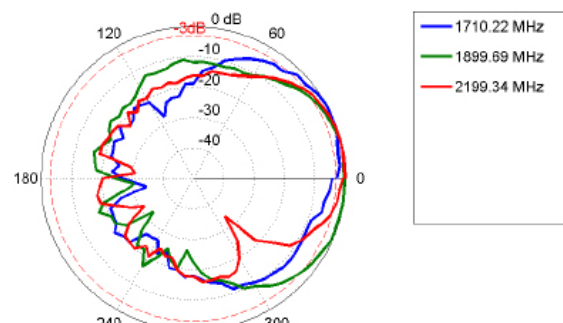
Azimuth: 2500 – 2700 MHz



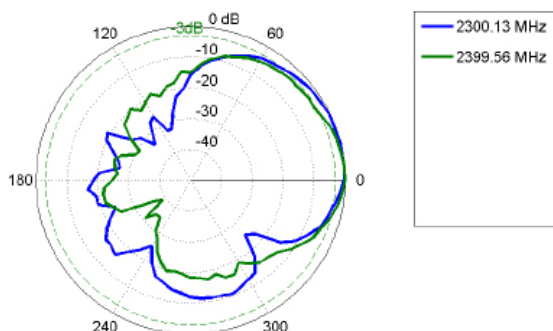
Elevation: 698 – 960 MHz



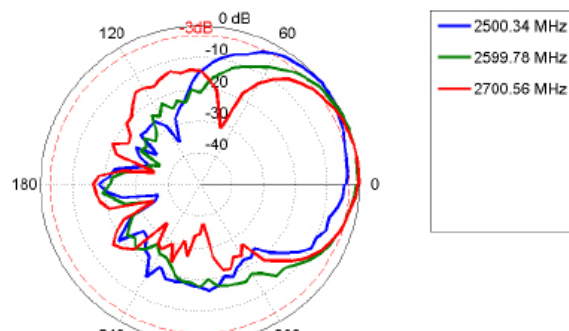
Elevation: 1710 – 2170 MHz



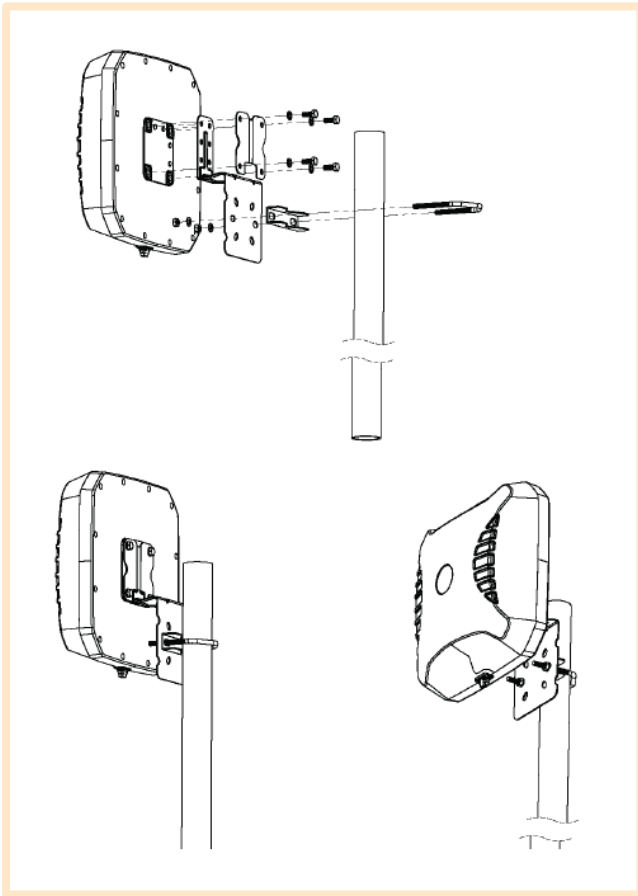
Elevation: 2300 – 2400 MHz



Elevation: 2500 – 2700 MHz

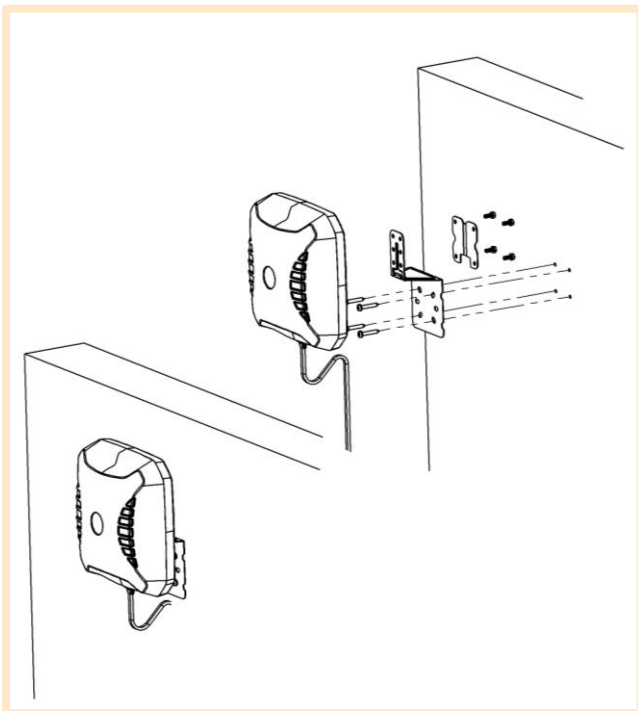


**Mounting Options**



**Pole Mount**

Pole/Wall Mounting bracket (included)



**Wall Mount**

Pole/Wall Mounting bracket (included)

---

### Additional Accessories

Extension Cables: Up to 10m HDF 195

Various connectors available

Installation poles and brackets available

See accessories technical specifications on [www.poynting.tech](http://www.poynting.tech)



**MobileMustHave**  
MOBILE LIFESTYLE SOLUTIONS

---

### 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)