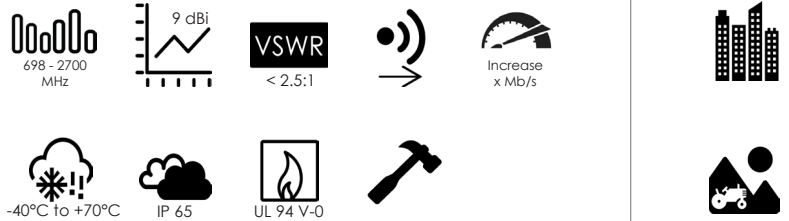


ANTENNAS | XPOL-2

XPOL-2

698 - 2700 MHZ HIGH GAIN CROSS POLARISED LTE MIMO ANTENNA



- Futureproof wideband LTE antenna and Wi-Fi operational frequencies.
- Backwards compatible with 3G, 2G technologies.
- Two cross polarised antennas in one enclosure for optimal LTE performance.
- Improves mobile network subscriber's user experience.
- Increased connectivity stability.
- Weather- and vandal resistant enclosure.

Product Overview

The antenna provides an innovative solution for 4G / 3G and 2G networks including Wi-Fi. It is a unique wall- or pole-mountable, dual polarised, full LTE band antenna. Incorporating two separately fed ultra wideband elements in a single housing, the antenna is equipped to provide client-side MiMo and diversity support for the networks of today and tomorrow. 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 user experience and secures client retention. It is ideal for any application using the GSM network (LTE/HSPA/3G/EDGE/GPRS).

Features

- High gain directional antenna
- Broadband covering multiple operational frequencies
- Wall or pole mountable
- Lightweight
- Waterproof
- Two cross polarized antennas in one enclosure


Application areas

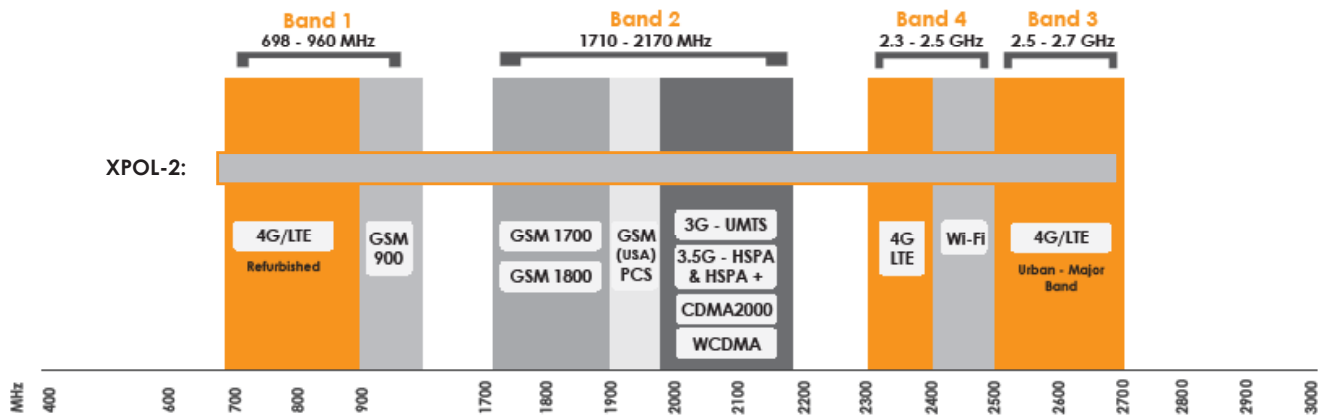
- Urban and rural areas
- Poor data signal reception (indoor or outdoor)
- Slow data transmission connection areas
- Unstable connection
- Increase system transmission reliability
- LTE fringe areas (close to an LTE area, but just out of reach)
- Network operator flexibility - as the antennas is wideband,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



Frequency bands

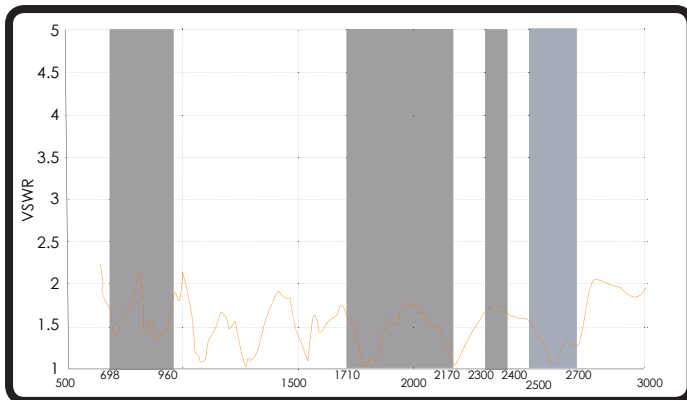
The XPOL-2 is a wide-band antenna that works from 698 - 2700 MHz

 Indicates the bands on which this antenna works



Antenna Performance Plots

VSWR:

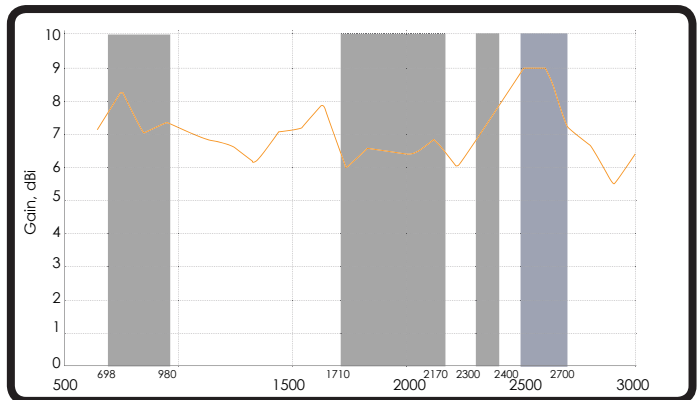


Voltage Standing Wave Ratio (VSWR)

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.

The XPOL-2 delivers superior performance across all bands with a VSWR of 2.5:1 or better.

Gain: (excluding cable loss)



Gain* in dBi

9dBi is the peak gain across all bands from 698 - 2700 MHz

Gain @ 698 - 960 MHz: 8 dBi

Gain @ 1710 - 2170 MHz: 6.5 dBi

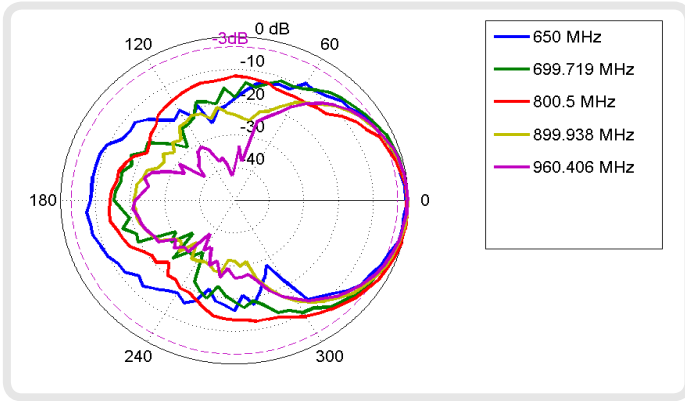
Gain @ 2300 - 2400 MHz: 7 dBi

Gain @ 2500 - 2700 MHz: 9 dBi

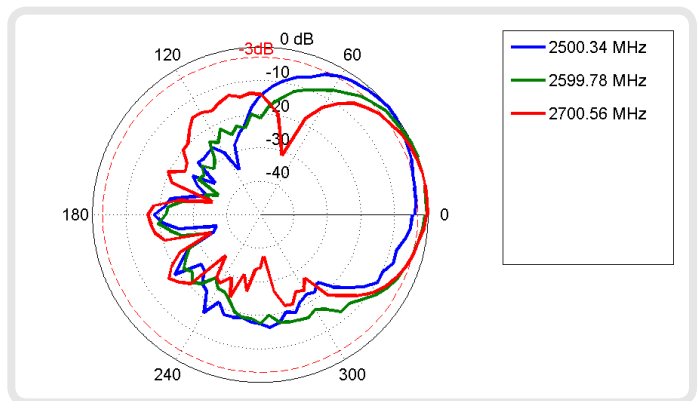
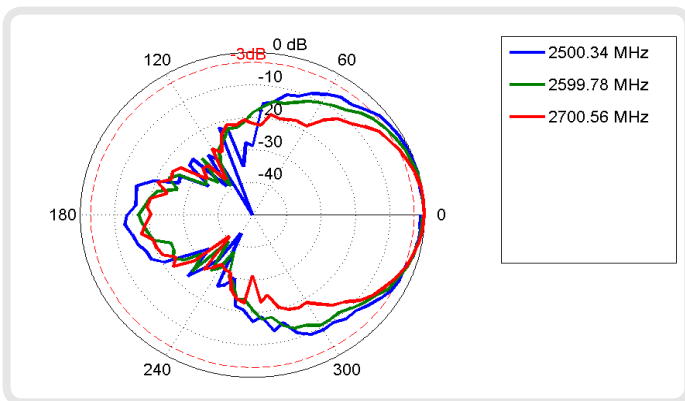
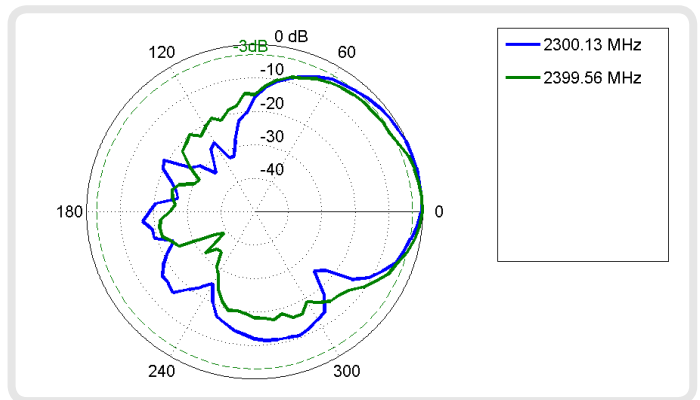
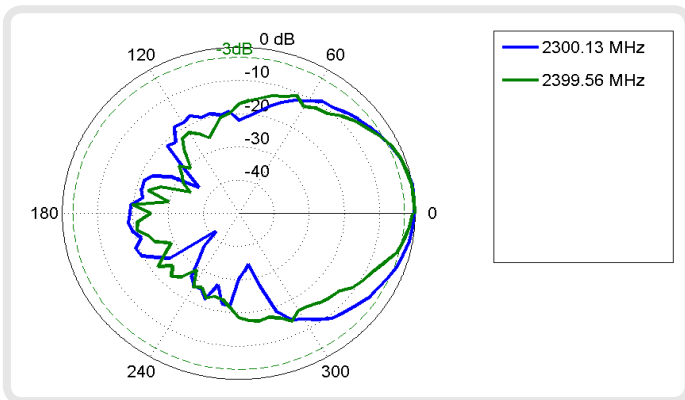
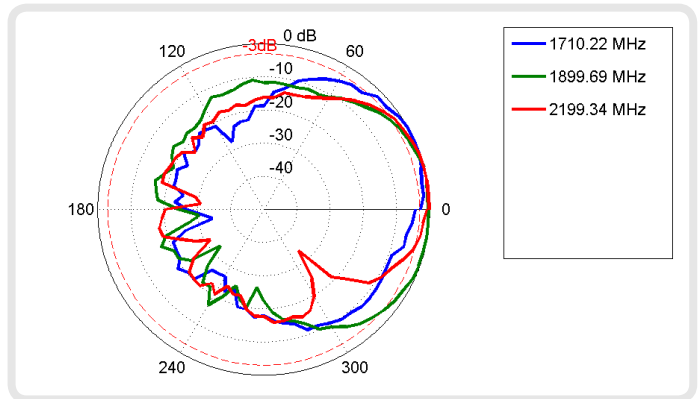
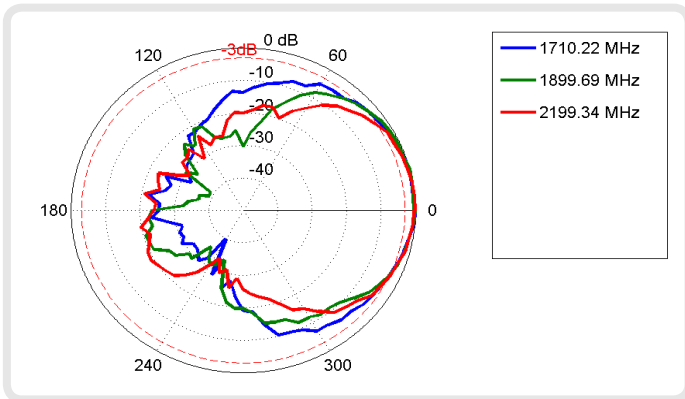
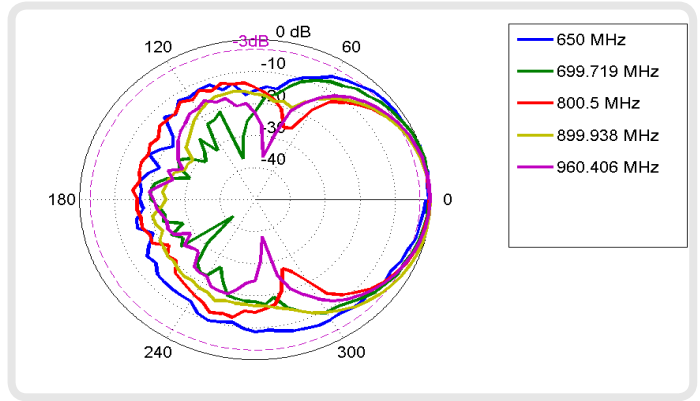
*Antenna gain measured with polarisation aligned standard antenna

Radiation Patterns

Azimuth:



Elevation:



Electrical Specifications

| | |
|-------------------------|--|
| Frequency Bands: | 698 - 960 MHz 1710 - 2170 MHz 2300 - 2400 MHz 2500 - 2700 MHz |
| Gain (Max): | 9 dBi |
| VSWR: | < 2.5:1 |
| Feed Power Handling: | 10 W |
| Input impedance: | 50 Ohm (nominal) |
| Polarisation: | 0° and 90° |
| Port to Port Isolation: | >15dB |
| MIMO decorrelation: | < 0.3 |
| Cable loss: | 0.35dB/m @900 MHz 0.53dB/m @ 2000 MHz 0.6dB/m @2500 MHz |
| DC Short: | Yes |

Environmental Specifications

| | |
|--------------------------------|----------------------------|
| Wind Survival: | <120km/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: | XPOL-2 |
| Order Product Code: | A-XPOL-0002-V2 |
| EAN number: | 6009693810051 |

Additional Accessories Available

| | |
|---|-------------------|
| Extension Cables: | Up to 10m HDF 195 |
| Various connectors available | |
| Installation poles and brackets available | |

For more detailed information and availability in your region, visit our web site: 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: sales@poynting.co.za

Mechanical Specifications

| | |
|---------------------------------|--------------------------------------|
| Product Dimensions (L x W x D): | 255 mm x 250 mm x 80 mm |
| Packaged Dimensions: | 290 mm x 267 mm x 98 mm |
| Weight: | 1,55 kg |
| Packaged Weight: | 1,98 kg |
| Radome Material: | ABS (Halogen Free) |
| Radome Colour: | Pantone - Cool Gray (1C) RAL 7047 |

Product Box Contents

| | |
|-------------------|---|
| Antenna: | A-XPOL-0002-V2 |
| Mounting Bracket: | 1 x Z-shaped mounting bracket suitable for wall or pole mount |
| Cable Length: | 5m |
| Cable Type: | Black twin siamese HDF 195 |
| Connector: | 2X SMA (M)Gold plated) |

The cables and connectors are factory mounted to the antenna



A-XPOL-0002-V2



Certification Approvals and Standards

| | |
|--|---|
| Flammability rating: | UL 94-V0 EN 13823 |
| 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 |

