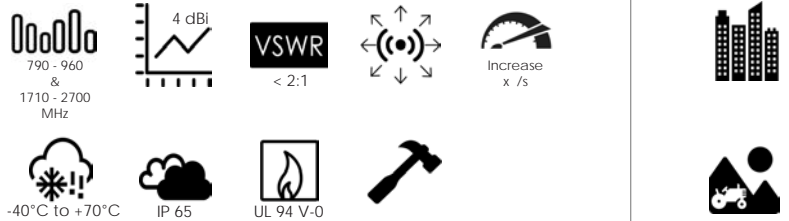


## ANTENNAS | XPOL-1

# XPOL-1

## 790 - 960 & 1710 - 2700 MHZ MEDIUM GAIN LTE MIMO ANTENNA



- Future-proof omni-directional wideband LTE antenna
- Backwards compatible with 3G, 2G technologies
- Two antennas in one enclosure for optimal LTE performance
- Improves mobile network subscriber's user experience
- Increased connectivity stability
- Weather- and vandal proof enclosure
- Pole, wall or window mountable

### Product overview

The antenna provides an innovative solution for the signal enhancement of 4G / 3G and 2G networks. It is a unique window, 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-1 antenna increases signal reliability, ensures higher data throughput for users and provides a stable, high quality connection. This improves user experience and secures client retention. It is ideal for any application using the GSM network (LTE/HSPA/3G/EDGE/GPRS).

### Features

- Medium gain omni-directional antenna
- Wideband - covers wide frequency band
- Window, wall or pole mountable
- Lightweight
- Waterproof
- Two antennas in one enclosure


### Application areas

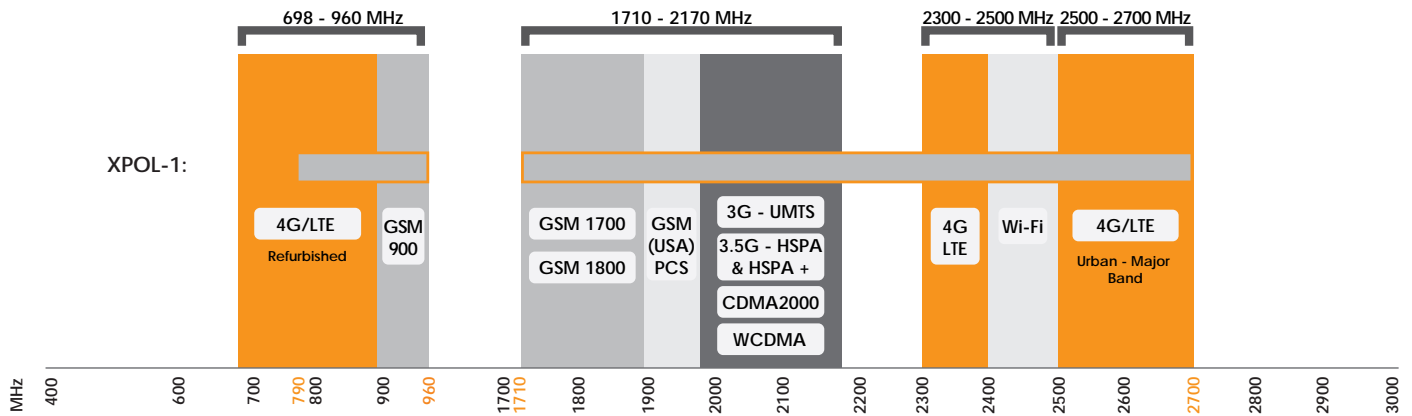
- Urban and rural areas
- Residential and Small & Medium Business
- Small offices in semi underground areas
- Poor data signal reception (indoor or outdoor)
- Slow data transmission connection
- Unstable connection
- Increase system transmission reliability
- LTE fringe areas (close to an LTE area, but 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



## Frequency bands

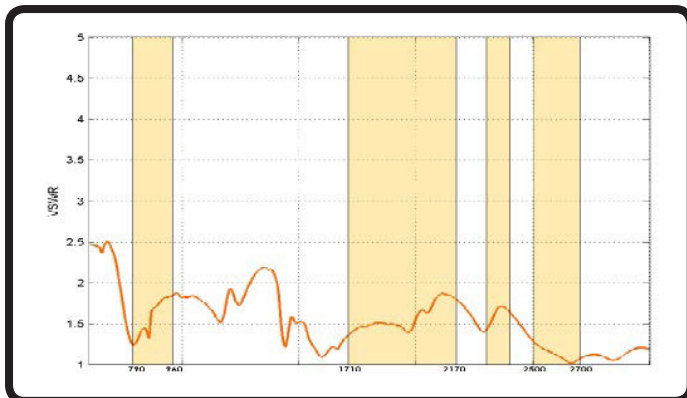
The XPOL-1 is a wide-band antenna that works from 790 - 960 MHz & 1710 - 2700MHz

 Indicates the bands on which this antenna works



## Antenna performance plots

VSWR:

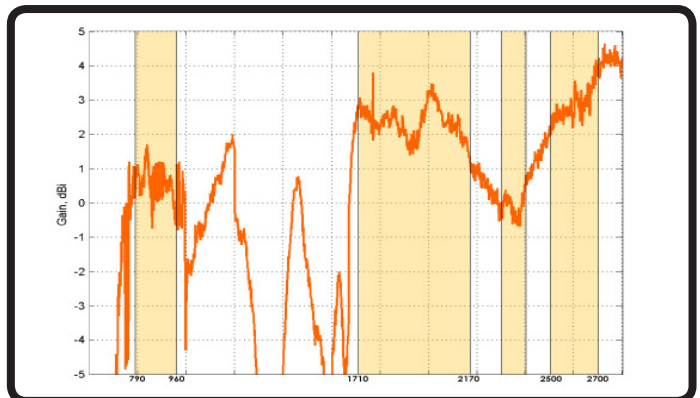


Voltage Standing Wave Ratio (VSWR)

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

Gain: (excluding cable loss)



Gain\* in dBi

4dBi is the peak gain across all bands from 790 - 2700 MHz

Gain @ 790 - 960 MHz:

1.6 dBi

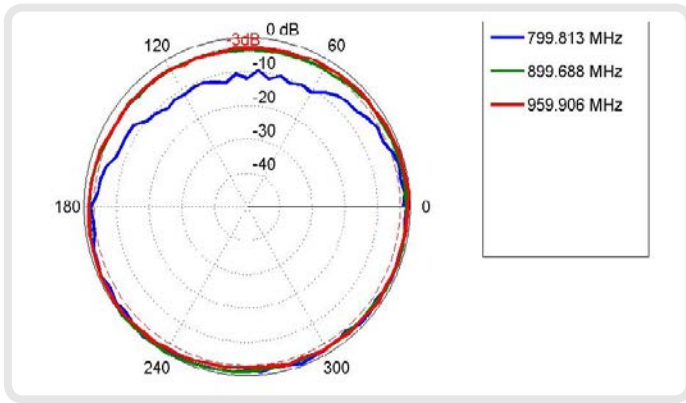
Gain @ 1710 - 2700 MHz:

4 dBi

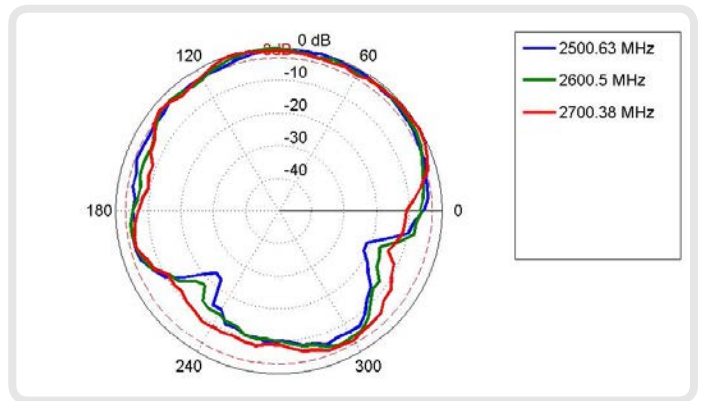
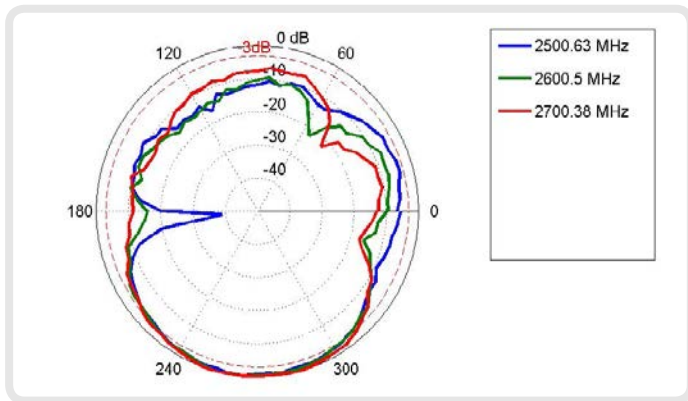
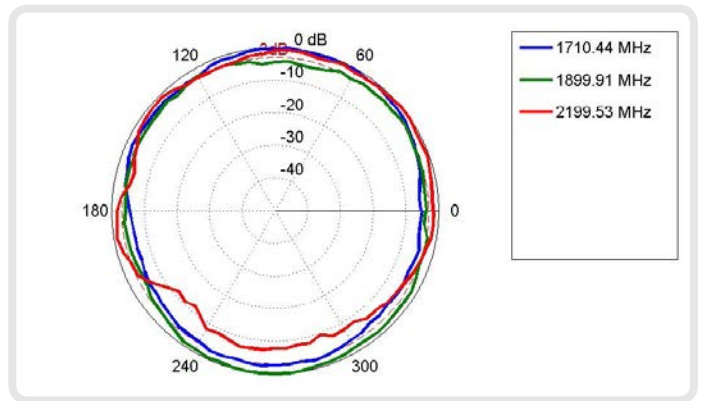
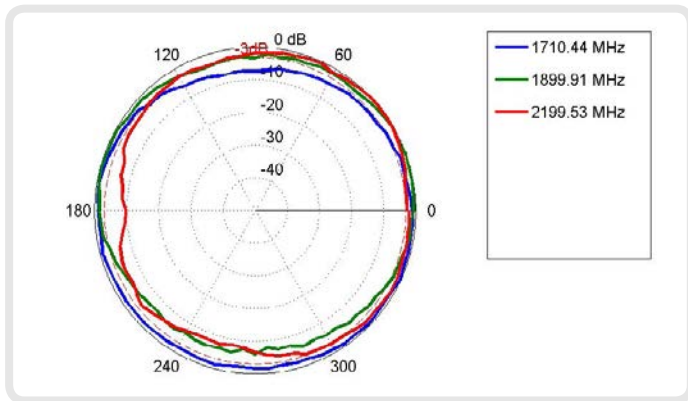
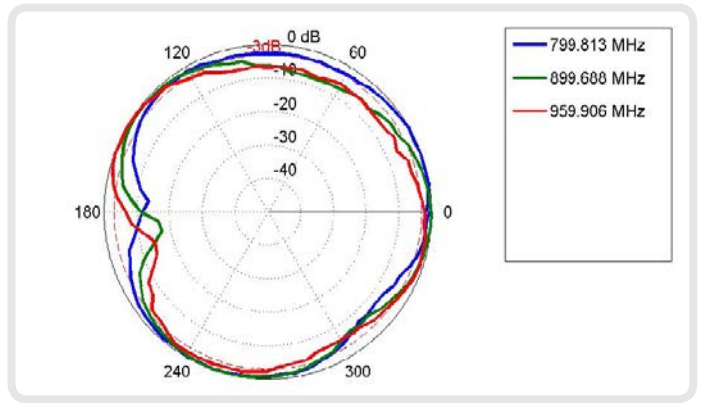
\*Antenna gain measured with polarisation aligned standard antenna

# Radiation patterns

Azimuth:



Elevation:



## Electrical specifications

Frequency bands:	790 - 960 MHz 1710 - 2700 MHz
Gain (max):	4 dBi
VSWR:	<2:1
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	+ 45° and -45°
Port to port isolation:	>15dBDC
MIMO decorrelation:	< 0.3
Cable loss:	0.35Db/m @900 MHz 0.53Db/m @ 2000 MHz 0.6Db/m @2500 MHz
DC short:	Yes
Cable length:	5m ±5%
Cable type:	HDF 195
Connector:	2 x SMA(m)

## Environmental specifications

Wind survival:	<120 km/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-1
Order product code:	A-XPOL-0001
EAN number:	6009693810754

## Additional accessories available

Various connectors available  
Installation poles and brackets available

For more detailed information and availability in your region,  
visit our web site: [www.poynting.tech](http://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](mailto:sales@poynting.co.za)

## Mechanical specifications

Product dimensions (L x W x D):	215 mm x 135 mm x 85 mm
Packaged dimensions:	260 mm x 150 mm x 95 mm
Weight:	0.62 kg
Packaged weight:	0.85 kg
Radome material:	ABS (Halogen Free)
Radome colour:	Pantone - Cool Gray (1C) RAL - 7047

## Product box contents

Antenna:	A-XPOL-0001
Mounting bracket:	Pole, wall and window suckers included

*The connector is factory mounted to the antenna*



A-XPOL-0001



## Certification approvals and standards

Flammability rating:	UL 94-V0 EN 13823
Water ingress protection ratio/standard:	IP 65
Impact resistance:	IK 08
Salt spray:	MIL-STD 810F/ASTM B117
Product safety:	Complies with UL, CE, EN, CSA and IEC standards

