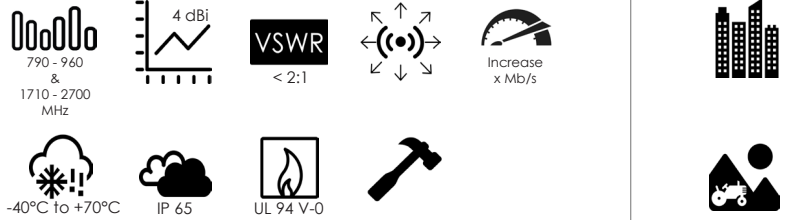


ANTENNAS | XPOL-1

XPOL-1

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



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


Application areas

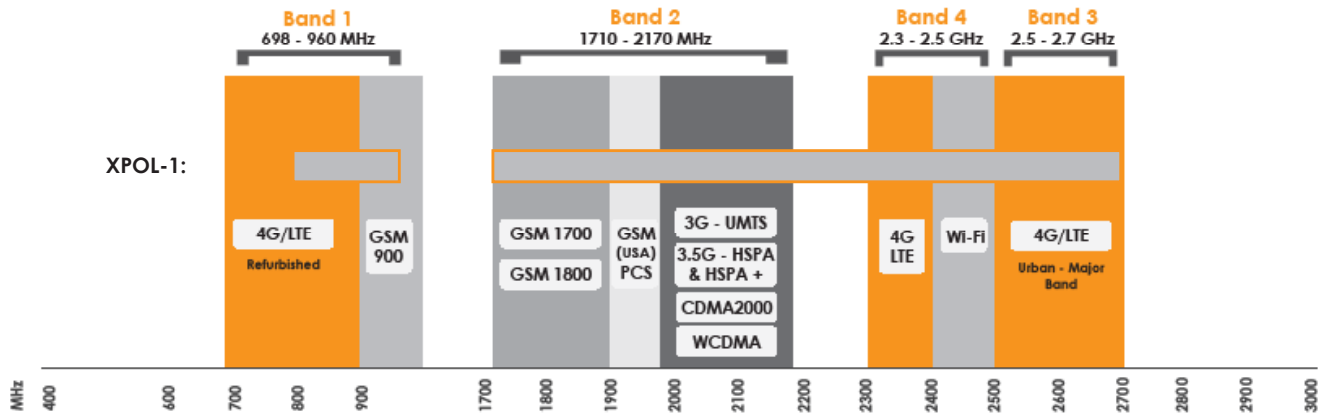
- Urban and rural areas
- Residential and Small & Medium Business
- Small offices in semi underground areas
- Poor data signal reception (indoor or outdoor)
- Slow data transmission connection
- Unstable connection
- Increase system transmission reliability
- LTE fringe areas (close to an LTE area, but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



Frequency bands

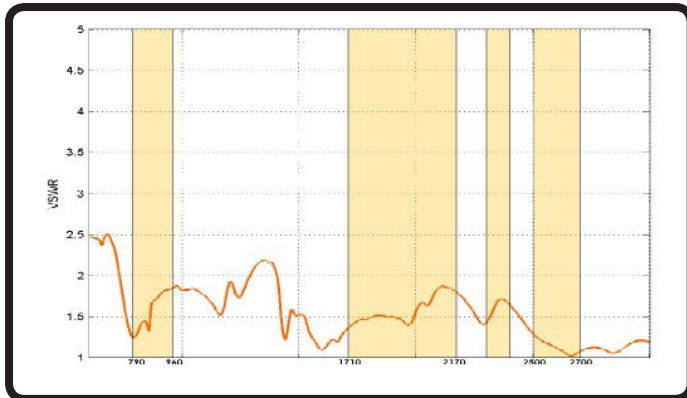
The XPOL-1 is a wide-band antenna that works from 790 - 960 MHz & 1710 - 2700MHz

 Indicates the bands on which this antenna works



Antenna Performance Plots

VSWR:

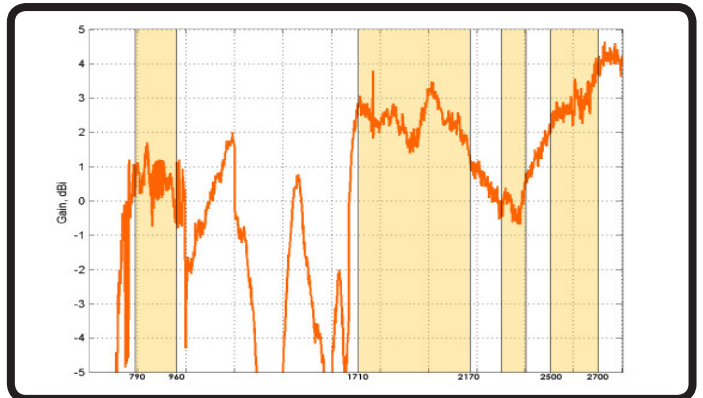


Voltage Standing Wave Ratio (VSWR)

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

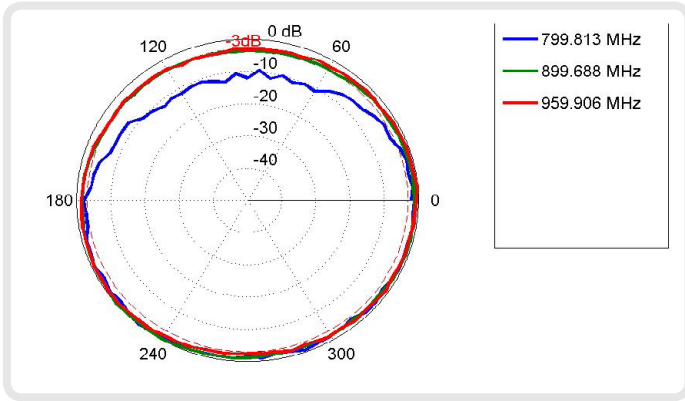
Gain @ 1710 - 2700 MHz:

4 dBi

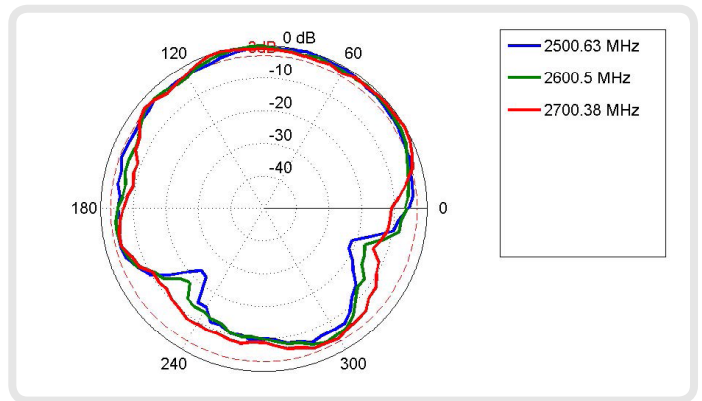
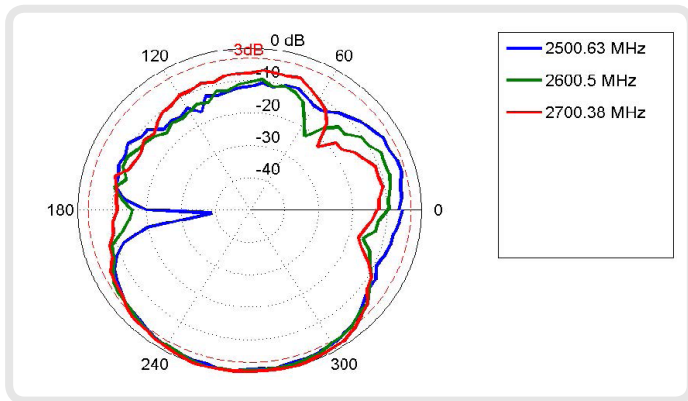
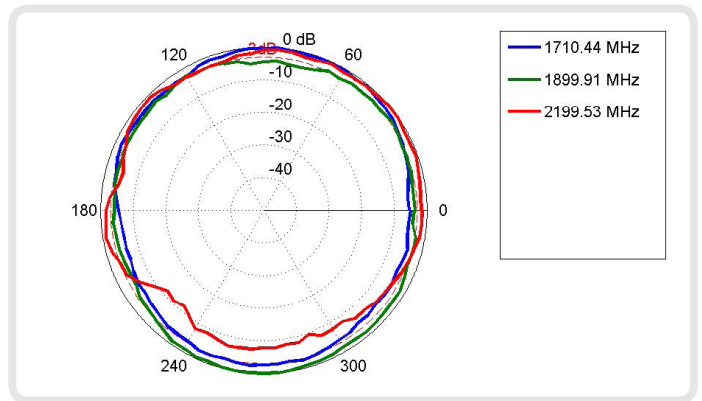
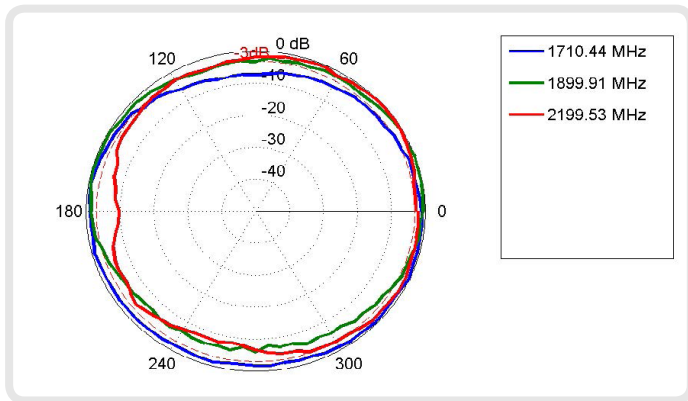
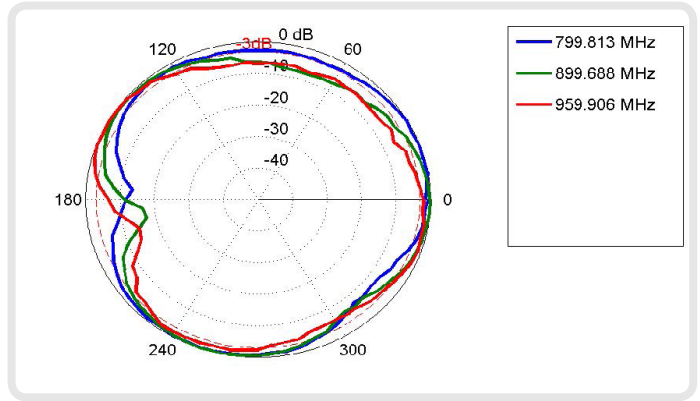
*Antenna gain measured with polarisation aligned standard antenna

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

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

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):	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
Cable Length:	5m
Cable Type:	HDF 195
Connector:	2 x SMA(m)

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 67
Impact resistance:	IK 08
Salt Spray:	MIL-STD 810F/ASTM B117
Product Safety:	Complies with UL, CE, EN, CSA and IEC standards

