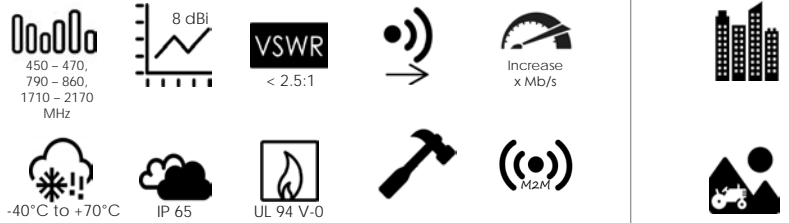


ANTENNAS | XPOL-16

XPOL-16

450 – 470, 790 – 860, 1710 – 2170 MHz HIGH GAIN CROSS POLARISED LTE MIMO ANTENNA



- Includes the new 450 - 470 MHz frequencies
- Futureproof wideband LTE 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

Product Overview

The antenna provides a unique frequency range from 450 – 470, 790 – 860, 1710 – 2170 MHz bands and is an innovative solution to boost reception of 4G, 3G and 2G network signals. It is a wall- or pole-mountable, dual polarised, full LTE band antenna. Incorporating two separately fed ultra wideband antenna 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-16 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
- Wideband - covers wide frequency band
- Wall or pole mountable
- Lightweight
- Two antennas in one enclosure

Application areas

- Machine-to-machine (M2M)
- Urban and rural 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
- Regulatory

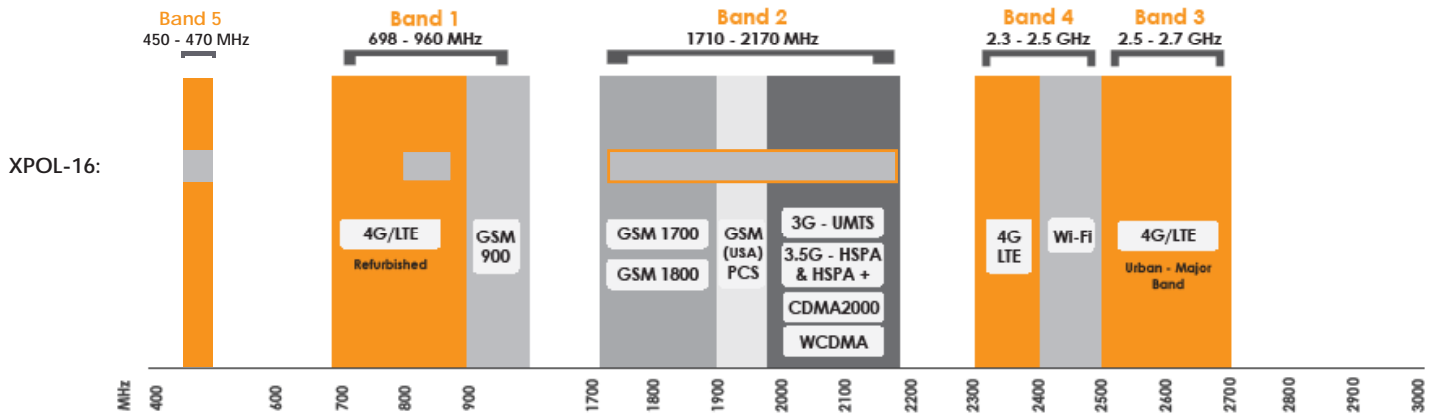


Frequency bands

The XPOL-16 is a wide-band antenna that works from 450 - 470, 790 – 860, 1710 – 2170 MHz

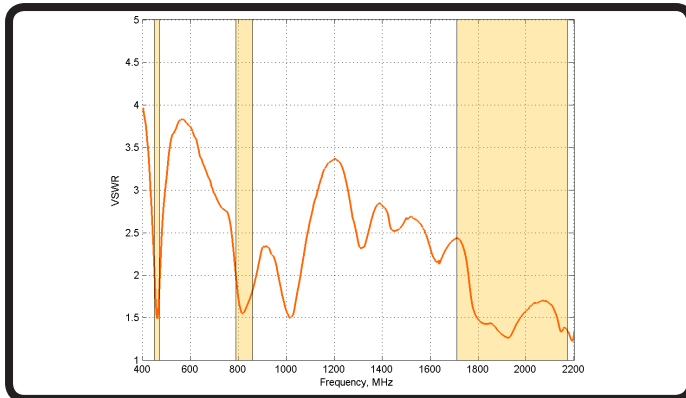


Indicates the bands on which this antenna works



Antenna Performance Plots

VSWR:

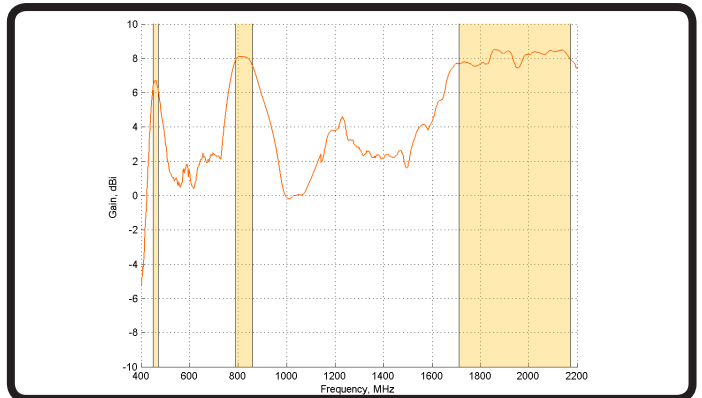


Voltage Standing Wave Ratio (VSWR)

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-16 delivers superior performance across all bands with a VSWR of 2.5:1 or better.

Gain: (excluding cable loss)



Gain* in dBi

8 dBi is the peak gain across all bands from 450 - 1880 MHz

Gain @ 450 - 470 MHz:

6.5 dBi

Gain @ 790 - 860 MHz:

8 dBi

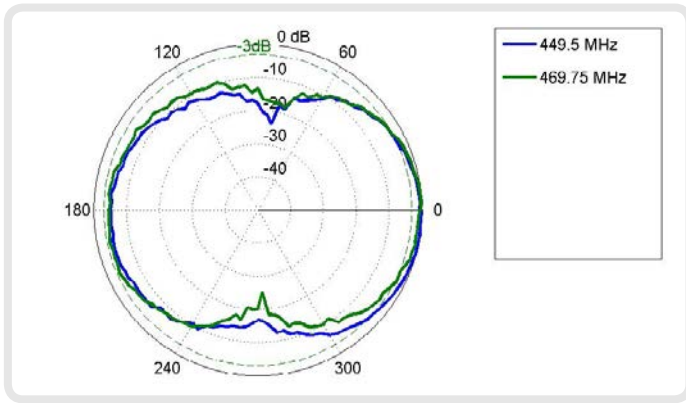
Gain @ 1710 - 2170 MHz:

8 dBi

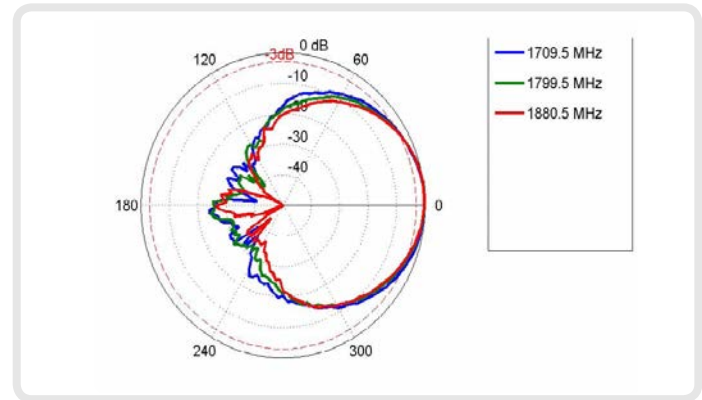
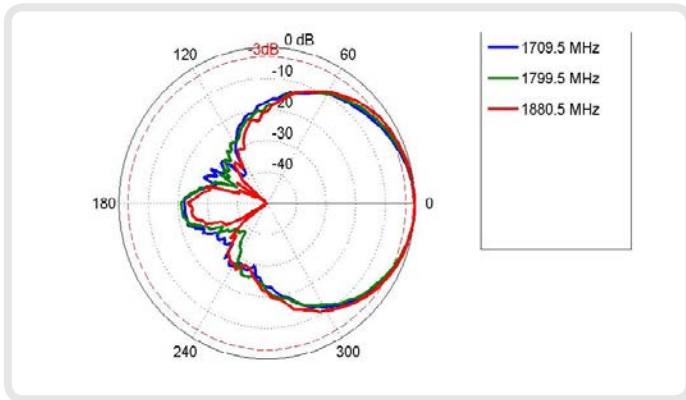
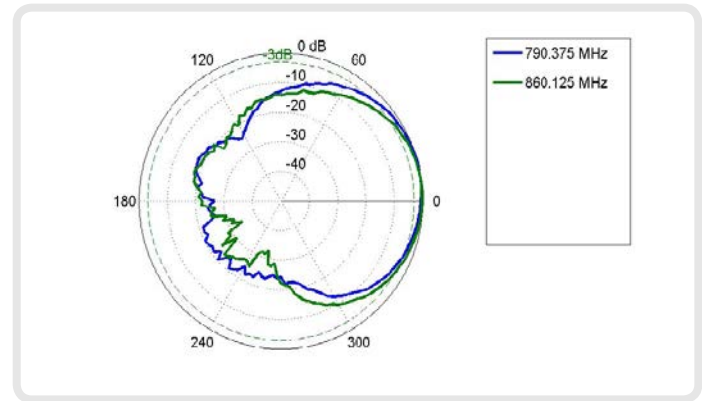
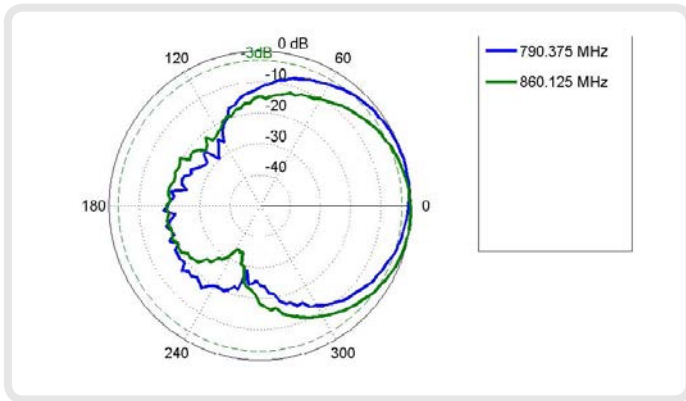
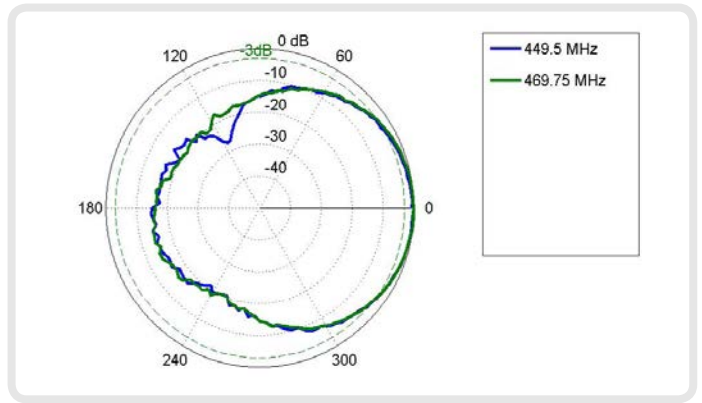
*Antenna gain measured with polarisation aligned standard antenna

Radiation Patterns

Azimuth:



Elevation:



Electrical Specifications

Frequency Bands:	450 - 470 MHz 790 - 860 MHz 1710 - 2170 MHz
Gain (Max):	8 dBi
VSWR:	<2.5:1
Feed Power Handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	+ 45° and - 45°
Port to Port Isolation:	>15dB
MIMO decorrelation:	< 0.3
Cable loss:	0.3 dB/m @ 450 MHz 0.35dB/m @ 900 MHz 0.53dB/m @ 2000 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-16
Order Product Code:	A-XPOL-0016
EAN number:	6009693810143

Additional Accessories Available

Extension Cables:	Up to 10m HDF 195
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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):	350x350x90mm
Packaged Dimensions:	360x360x98mm
Weight:	1.98 kg
Packaged Weight:	2.38 kg
Radome Material:	ABS (Halogen Free)
Radome Colour:	Pantone - Cool Gray (1C) RAL - 7047

Product Box Contents

Antenna:	A-XPOL-0016
Mounting Bracket:	1 x Z-shaped mounting bracket suitable for wall or pole mount
Cable Length:	5m ±5%
Cable Type:	Twin siamese HDF 195
Connector:	2 x Gold Plated SMA(m)

The connector is factory mounted to the antenna



A-XPOL-0016



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

