XPOL-6

ANTENNAS | XPOL-6 SERIES

X-POLARISED, HIGH GAIN, DIRECTIONAL LTE ANTENNA

2X2 LTE (MIMO); 1710 - 2700 MHz, 11 dBi

1710 – 2700 MHz; 11 dBi; Increase x Mb/s; Uni-Directional; Machine to Machine; 4G LTE

2.4 – 2.5 GHz; IP 65; -40°C to +70°C; Fire Resistant; 2x2 MIMO

- **Cross-polarised with high-gain for LTE applications**
- **Futureproof wideband LTE antenna and Wi-Fi operational frequencies**
- **Backwards compatible with 2G and 3G technologies**
- **Two antennas in one enclosure for optimal LTE performance**
- **2X2 MIMO LTE/4G antenna**
- **Increased connectivity stability**

APPLICATION AREAS

Urban

Rural/Farm

Product Overview

The XPOL-6 is a unique antenna, which provides a unique solution with a constant high gain for 4G, 3G and 2G networks. The XPOL-6 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. This is done by incorporating two separately fed ultra-wideband elements in a single housing, which is a cost-effective solution for enhancing signal reception. The XPOL-6 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

- High gain antenna for LTE applications
- Uni-directional – radiates in one direction
- Wideband frequency ranges from 1710 – 2700 MHz
- Also covers Wi-Fi for 2400 – 2500 MHz
- Two 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

Revised: June 2020

Regulatory Compliance: RoHS 2011/65/EU Compliant | ISO 9001:2015
Document version: TS-A-XPOL-0006 REV2
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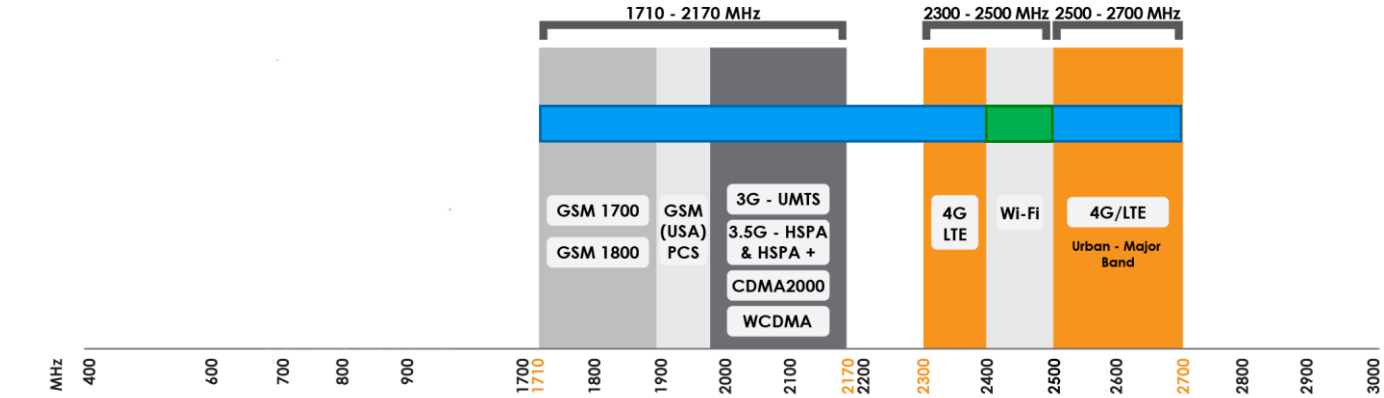
Frequency Bands

The XPOL-6 is a directional antenna that works from 1710 – 2700 MHz



Indicates the LTE bands on which **XPOL-6 works**

Indicates the WI-FI bands on which **XPOL-6 works**

Antenna Overview

	LTE
Ports	2
SISO / MIMO	2x2 MIMO
Frequency Bands	1710 – 2700 MHz
Polarisation	+ 45° and - 45°
Peak Gain	11 dBi
Coax Cable Type	Twin HDF 195
Coax Cable Length	10m
Connector Type	SMA (M)

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Electrical Specifications

Frequency bands:	1710 – 2700 MHz
Gain (max):	11 dBi
VSWR:	<2:1
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	+ 45° and - 45°
Coax cable loss:	0.565 dB/m @ 1800 MHz 0.584 dB/m @ 2000 MHz 0.666 dB/m @ 2400 MHz 0.669 dB/m @ 2500 MHz
DC short:	Yes

Product Box Contents

Antenna:	A-XPOL-0006-10M
Mounting bracket:	Pole or wall mounting bracket

Ordering Information

Commercial name:	XPOL-6-10M
Order product code:	A-XPOL-0006-10M
EAN number:	6009693810129

Mechanical Specifications

Product dimensions	301 mm x 144 mm x 56 mm
Packaged dimensions:	360 mm x 160 mm x 115 mm
Weight:	1.35 kg
Packaged weight:	1.60 kg
Radome material:	ABS (Halogen Free)
Radome colour:	Pantone- Cool Gray (1C) RAL 7047
Mounting Type:	Pole and wall mount

Environmental Specifications, Certification & Approvals

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

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Antenna Performance Plots

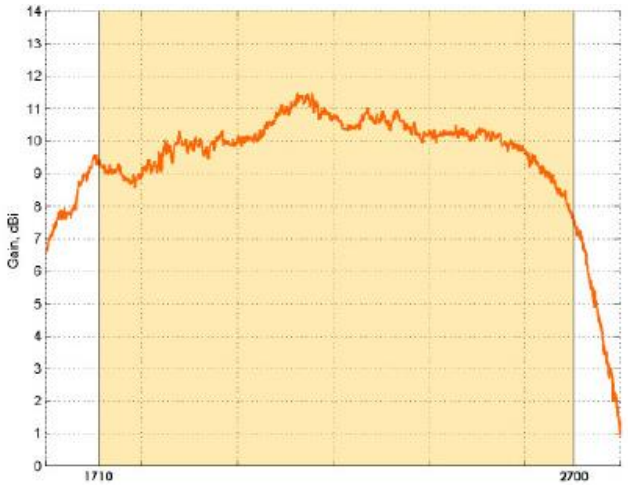
VSWR

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-6 delivers superior performance across all bands with a VSWR of 2:1 or better.

GAIN (EXCLUDING CABLE LOSS)



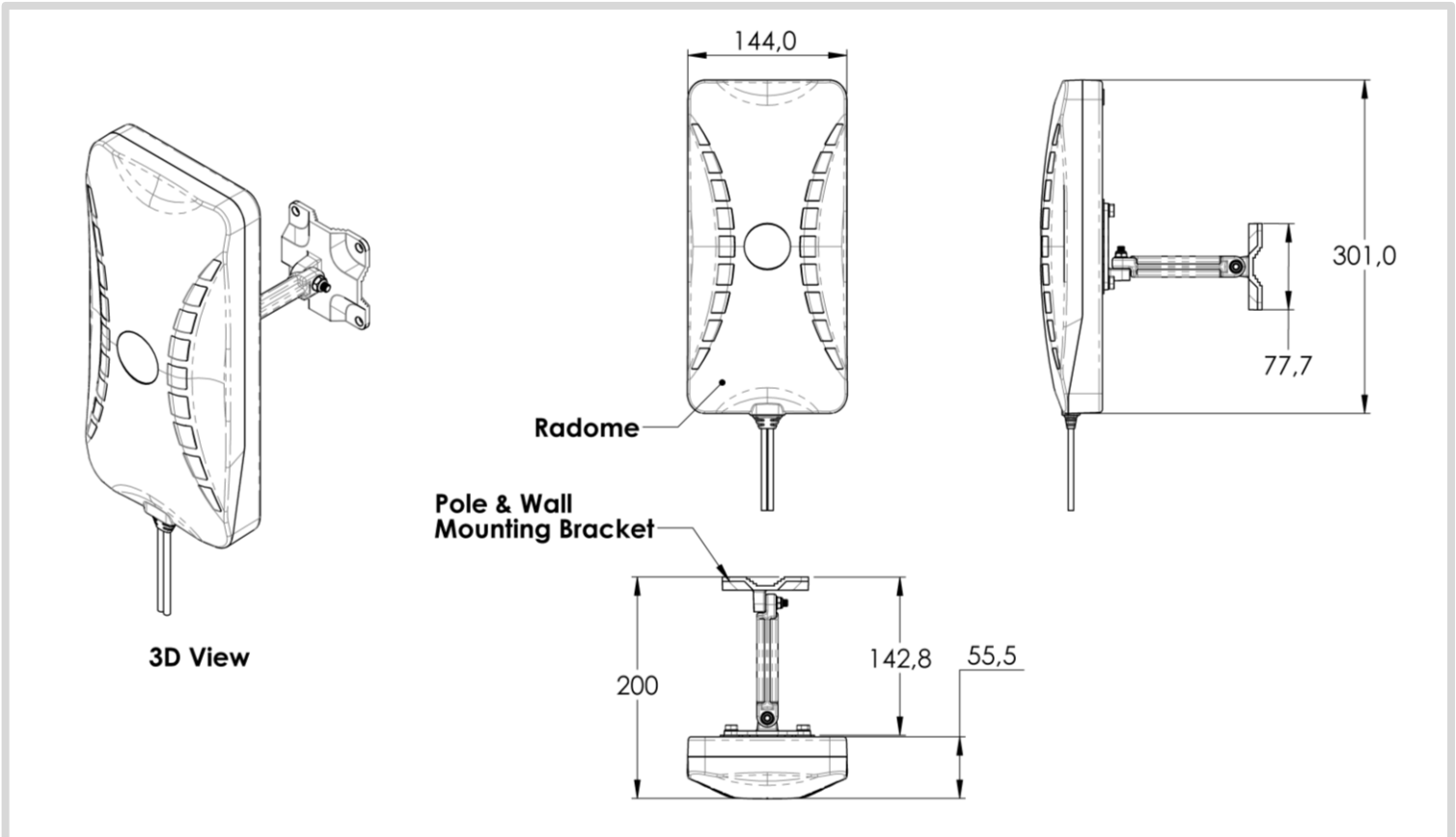
Gain* in dBi

11 dBi is the peak gain across all bands from 1710 – 2700 MHz

Gain @ 1710 – 2700 MHz: 11 dBi

**Antenna gain measured with polarisation aligned standard antenna*

Technical Drawings



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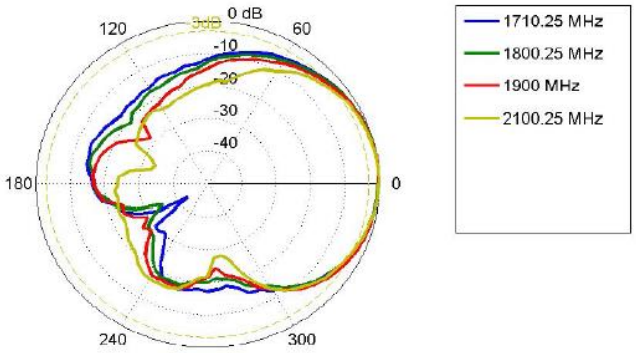
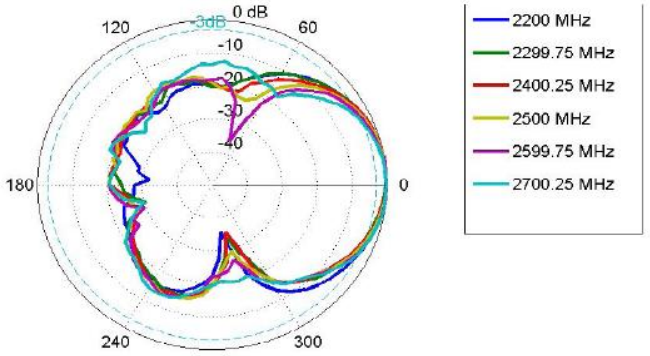
Radiation Patterns

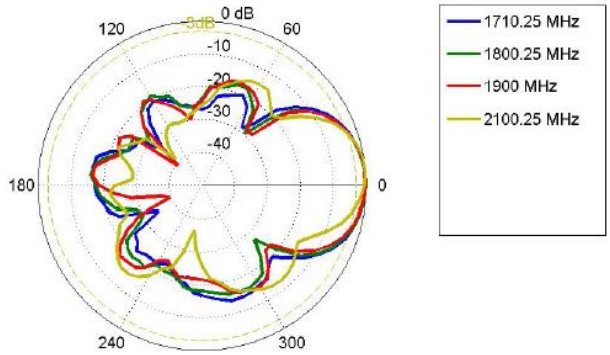
Azimuth: 1710 – 2100 MHz



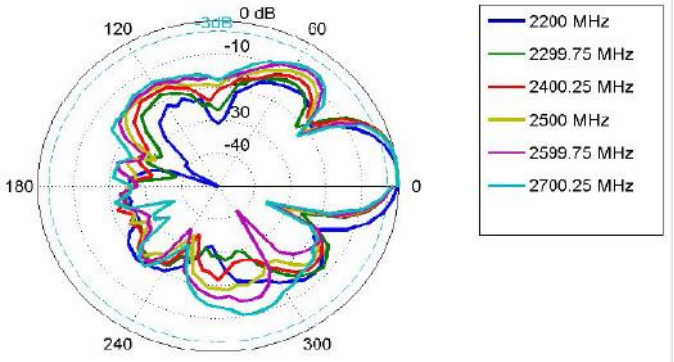
Azimuth: 2200 – 2700 MHz



Elevation: 1710 – 2100 MHz



Elevation: 2200 – 2700 MHz



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Mounting Options

Pole Mount

Pole/Wall Mounting bracket (included)

Wall Mount

Pole/Wall Mounting bracket (included)

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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

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