

## ANTENNAS | XPOL-6 SERIES

# X-POLARISED, HIGH GAIN, DIRECTIONAL LTE ANTENNA

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   | 2x2 MIMO | Fire Resistant  | IP 65           | -40°C to +80°C     |        |



APPLICATION AREAS

- 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

## 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

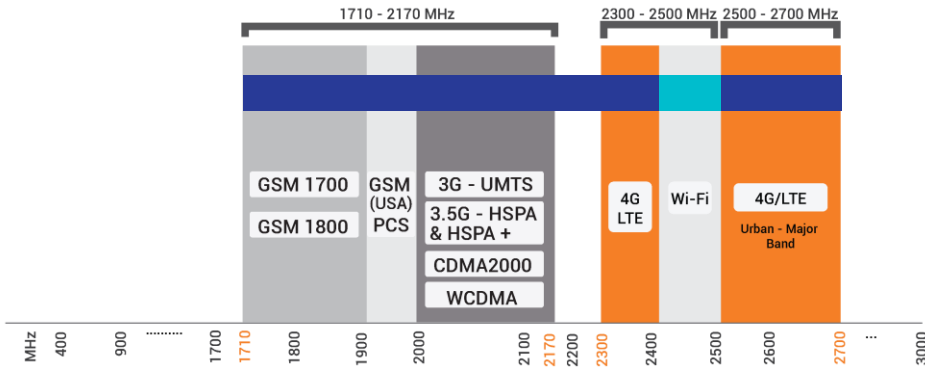
## Application Areas

- 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



## 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

|                   |  |
|-------------------|--|
|                   |  |
| 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)  |

*\*The coax cable & connector are factory mounted to the antenna*

### 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<br>0.666 dB/m @ 2400 MHz |
| Path to Ground:      | 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)<br>RAL 7047 |
| Mounting Type:       | Wall and Pole Mount                  |

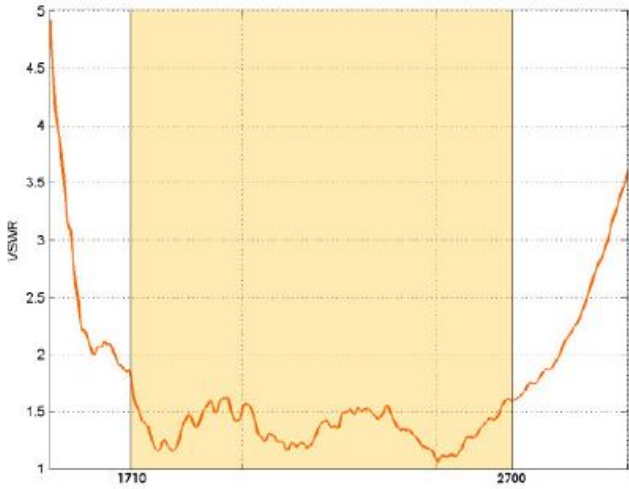
### Environmental Specifications, Certification & Approvals

|                                 |                                     |
|---------------------------------|-------------------------------------|
| Antenna Wind Survival:          | <120 km/h                           |
| Temperature Range (Operating):  | -40°C to +80°C                      |
| Environmental Conditions:       | Outdoor/Indoor                      |
| Ingress Protection:             | IP 65                               |
| Salt Spray:                     | MIL-STD 810G/ASTM B117              |
| Operating Relative Humidity:    | Up to 98%                           |
| Storage Humidity:               | 5% to 95% - non-condensing          |
| Storage Temperature:            | -40°C to +80°C                      |
| Enclosure Flammability Rating:  | UL 94-HB                            |
| Impact Resistance:              | IK 08                               |
| Product Safety & Environmental: | Complies with CE and RoHS standards |

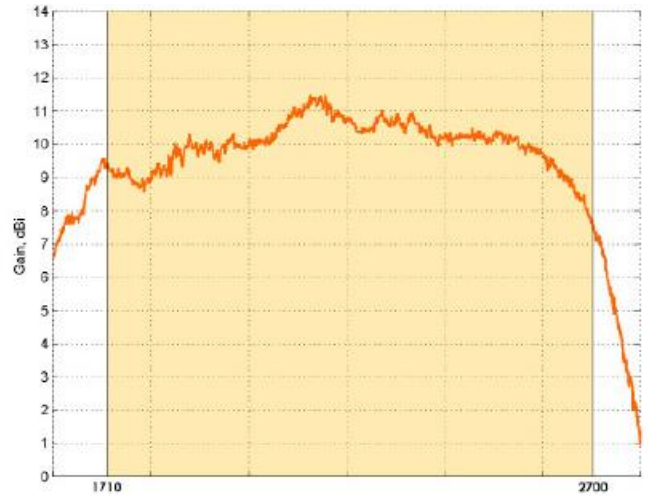


Antenna Performance Plots

VSWR



GAIN (EXCLUDING CABLE LOSS)



**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.

\*VSWR measured with a 10m low loss cable.

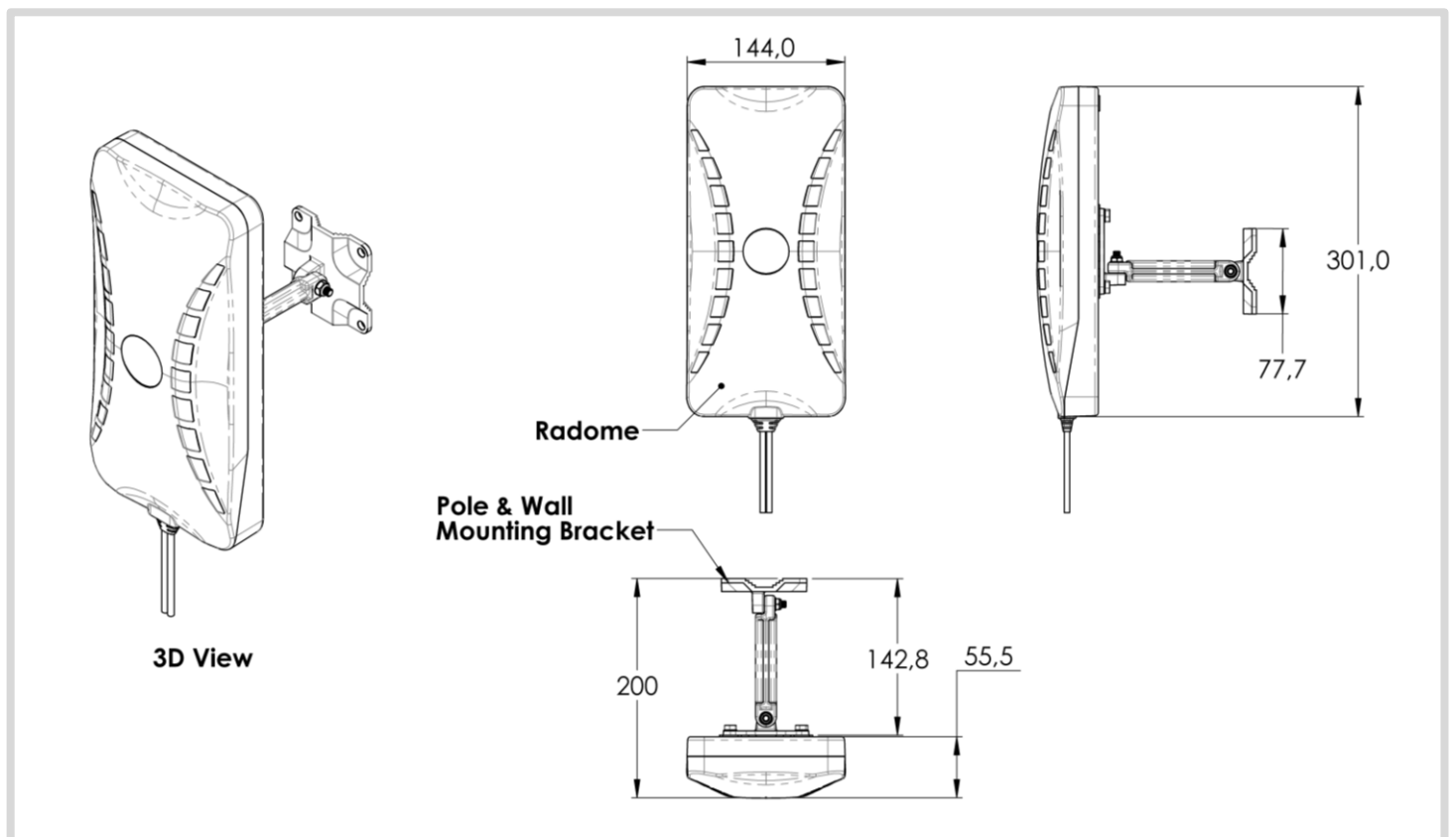
**Gain\* in dBi**

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

Gain @ 1710 – 2700 MHz: 11 dBi

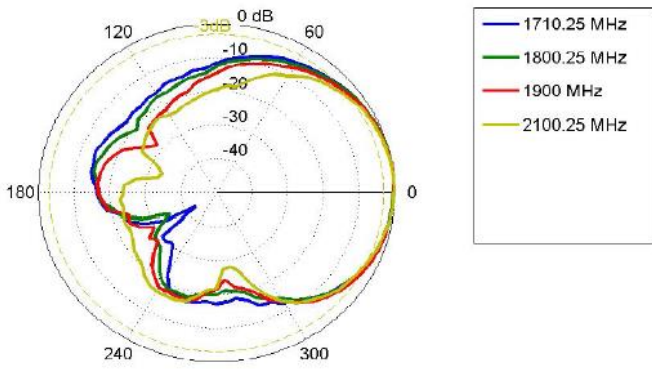
\*Antenna gain measured with polarisation aligned standard antenna

Technical Drawings

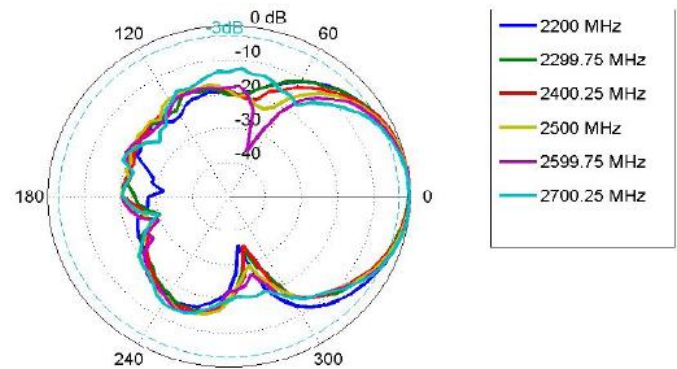


**Radiation Patterns**

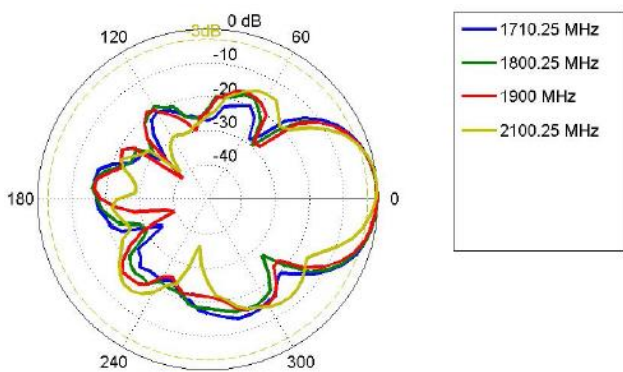
**Azimuth: 1710 - 2100 MHz**



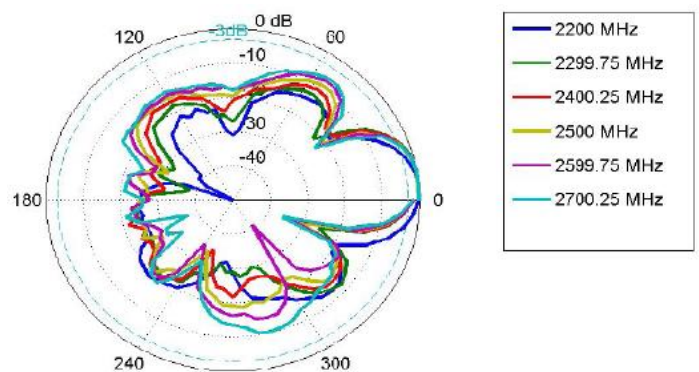
**Azimuth: 2200 - 2700 MHz**



**Elevation: 1710 - 2100 MHz**



**Elevation: 2200 - 2700 MHz**



**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](http://www.poynting.tech)

## Contact USAT to Order



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