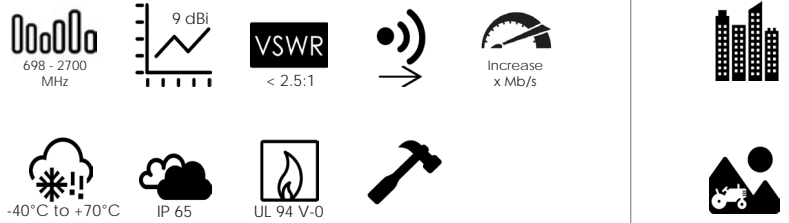


## ANTENNAS | PY-P-PS200-09W-16 (XPOL-2-4G)

### 698 - 2700 MHZ HIGH GAIN CROSS POLARISED LTE MIMO ANTENNA



- Futureproof wideband LTE antenna and Wi-Fi operational frequencies.
- Backwards compatible with 3G, 2G technologies.
- Two cross polarised 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 an innovative solution for 4G / 3G and 2G networks including Wi-Fi. It is a unique 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-2 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
- Broadband covering multiple operational frequencies
- Wall or pole mountable
- Lightweight
- Waterproof
- Two cross polarized antennas in one enclosure


#### Application areas

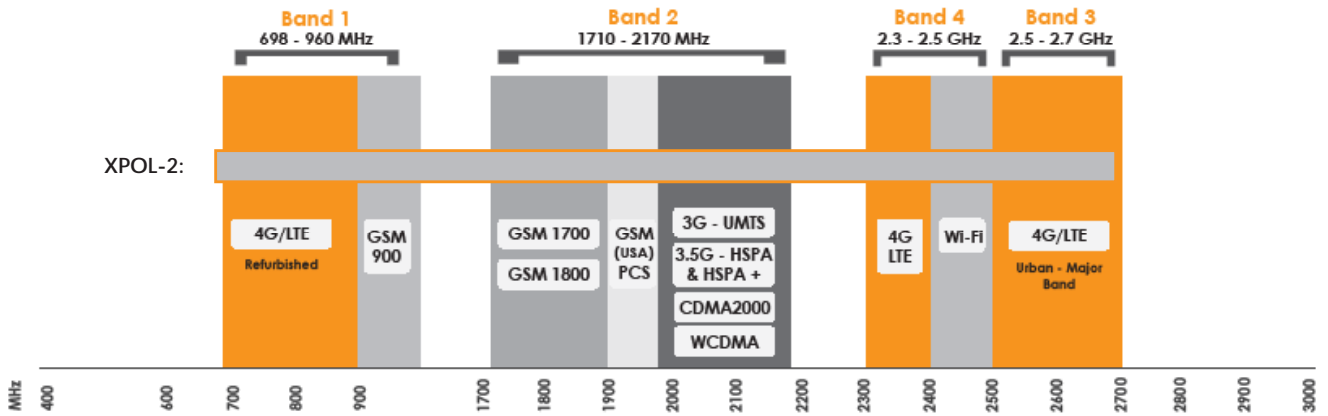
- Urban and rural areas
- Poor data signal reception (indoor or outdoor)
- Slow data transmission connection areas
- Unstable connection
- Increase system transmission reliability
- LTE fringe areas (close to an LTE area, but just out of reach)
- Network operator flexibility - as the antennas is wideband,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



## Frequency bands

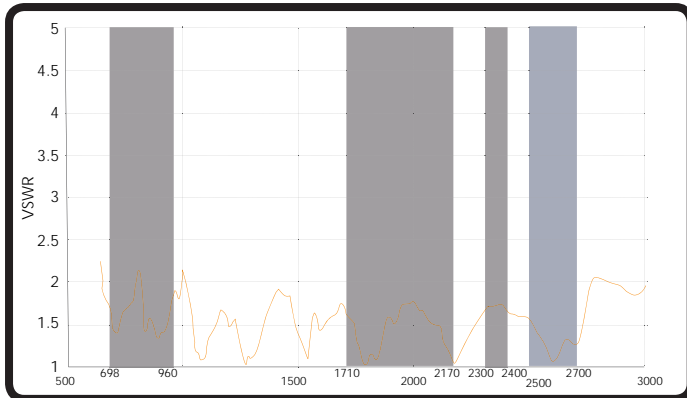
The XPOL-2 is a wide-band antenna that works from 698 - 2700 MHz

 Indicates the bands on which this antenna works



## Antenna Performance Plots

VSWR:

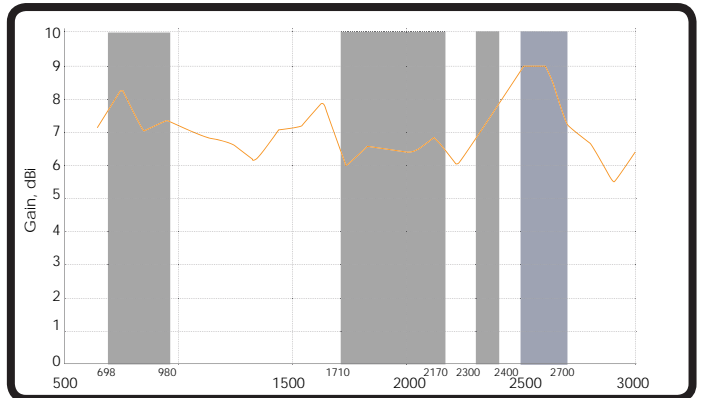


Voltage Standing Wave Ratio (VSWR)

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-2 delivers superior performance across all bands with a VSWR of 2.5:1 or better.

Gain: (excluding cable loss)



Gain\* in dBi

9dBi is the peak gain across all bands from 698 - 2700 MHz

Gain @ 698 - 960 MHz: 8 dBi

Gain @ 1710 - 2170 MHz: 6.5 dBi

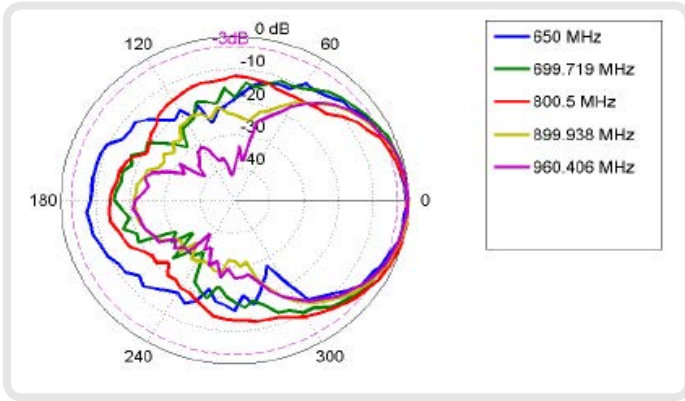
Gain @ 2300 - 2400 MHz: 7 dBi

Gain @ 2500 - 2700 MHz: 9 dBi

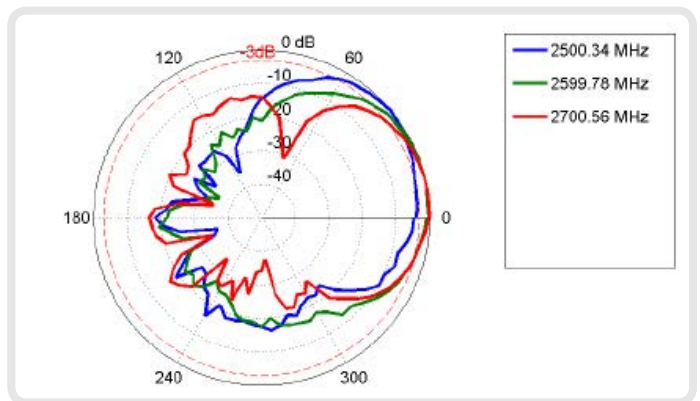
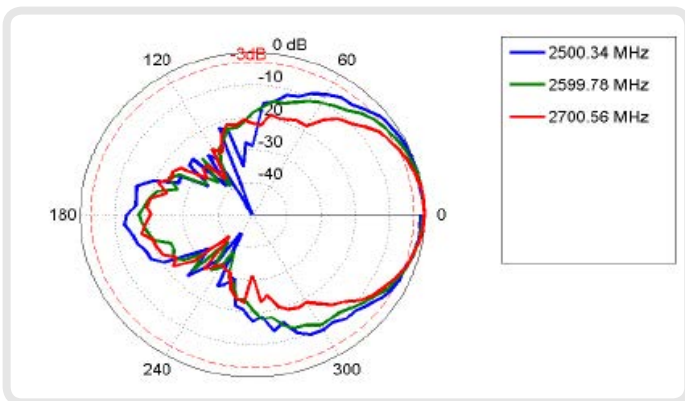
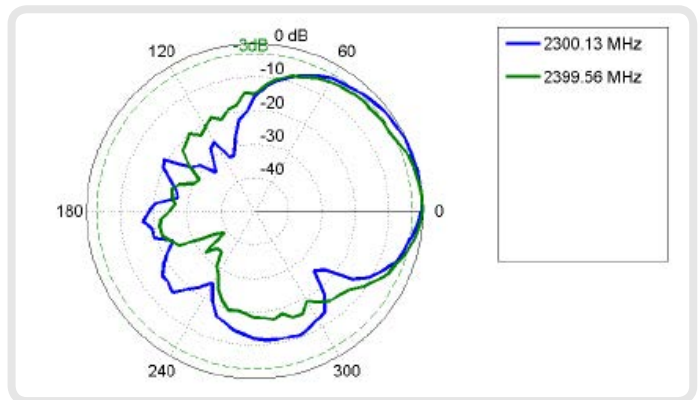
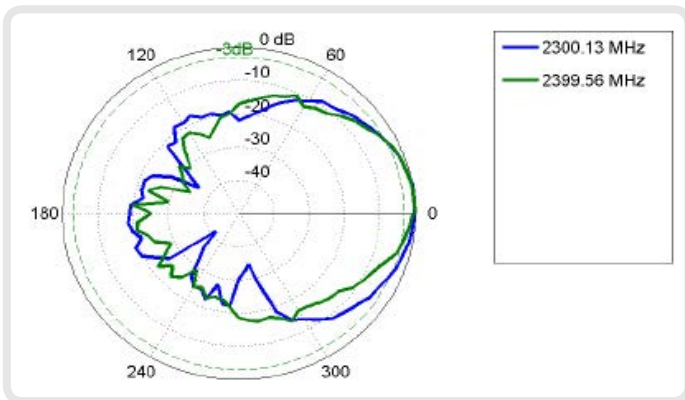
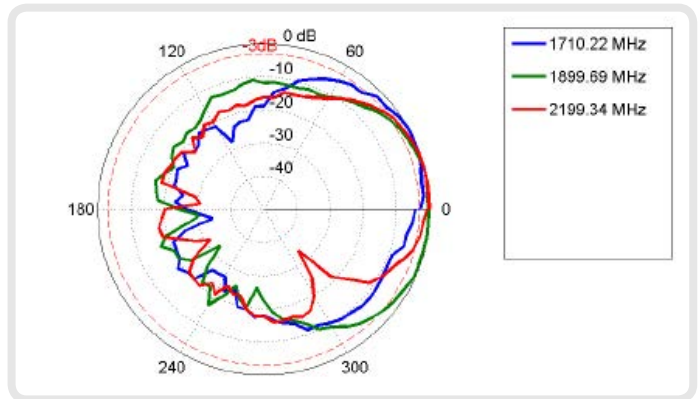
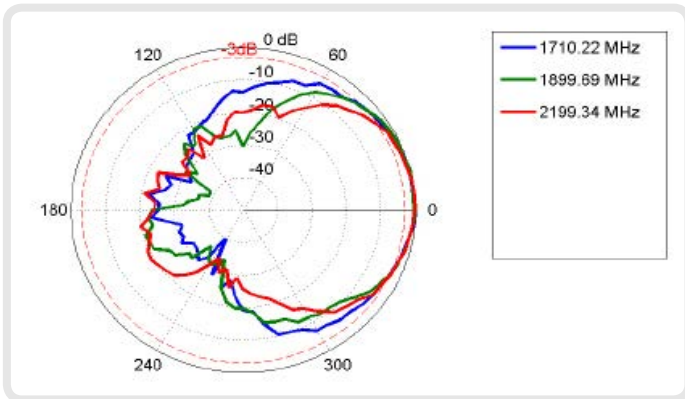
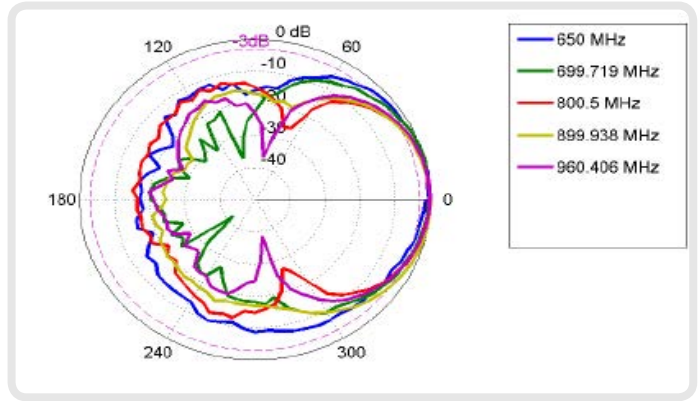
\*Antenna gain measured with polarisation aligned standard antenna

# Radiation Patterns

Azimuth:



Elevation:



## Electrical Specifications

Frequency Bands:	698 - 960 MHz 1710 - 2170 MHz 2300 - 2400 MHz 2500 - 2700 MHz
Gain (Max):	9 dBi
VSWR:	< 2.5:1
Feed Power Handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	0° and 90°
Port to Port Isolation:	>15dB
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:	<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-2
Order Product Code:	PY-P-PS200-09W-16
EAN number:	6009693810051

## Additional Accessories Available

Extension Cables:	Up to 10m HDF 195
Various connectors available	
Installation poles and brackets available	

For more detailed information and availability in your region, visit our web site: [www.usatcorp.com](http://www.usatcorp.com)

## Contact Us

### USAT | Connect What's Critical™

605 Eastowne Drive  
Chapell Hill, NC 27514

**Phone:** (919) 942-4214  
**E-mail:** [info@usatcorp.com](mailto:info@usatcorp.com)  
**Web:** <https://usatcorp.com>

## Mechanical Specifications

Product Dimensions (L x W x D):	255 mm x 255 mm x 80 mm
Packaged Dimensions:	290 mm x 267 mm x 98 mm
Weight:	1,55 kg
Packaged Weight:	1,98 kg
Radome Material:	ABS (Halogen Free)
Radome Colour:	Pantone - Cool Gray (1C) RAL 7047

## Product Box Contents

Antenna:	PY-P-PS200-09W-16
Mounting Bracket:	1 x Z-shaped mounting bracket suitable for wall or pole mount
Cable Length:	5m ±5%
Cable Type:	Black twin siamese HDF 195
Connector:	2X SMA (M)Gold plated)

*The cables and connectors are factory mounted to the antenna*



A-XPOL-0002-V2



## Certification Approvals and Standards

Flammability rating:	UL 94-HB
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

