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

Antenna Performance Plots

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* 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 polarization 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

Product Specifications may change without prior notice
Revised: September 2015

Mechanical Specifications

Product Dimensions (L x W x D):
- 255 mm x 250 mm x 80 mm
- 290 mm x 267 mm x 98 mm

Weight:
- 1.55 kg
- 1.98 kg

Radome Material:
- ABS (Halogen Free)

Radome Colour:
- Pantone - Cool Gray (1C)
- RAL 7047

Product Box Contents

Antenna:
- A-XPOL-0002-V2

Mounting Bracket:
- 1 x Z-shaped mounting bracket suitable for wall or pole mount

Cable Length:
- 5m

Cable Type:
- Black twin siamese HDF 195

Connector:
- 2X SMA (M) Gold plated

The cables and connectors are factory mounted to the antenna

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.poynting.tech

Contact Poynting

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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