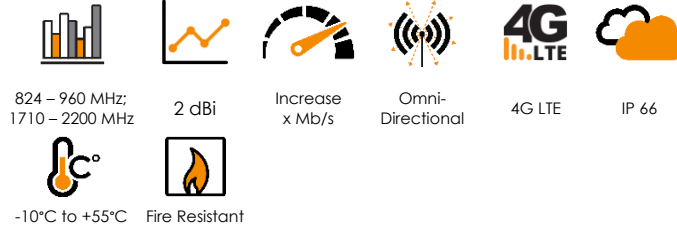


ANTENNAS | DIPL-1 SERIES

COVERT GSM, OMNI-DIRECTIONAL, 2G/3G/LTE ANTENNA

LTE; 824 – 960 MHz, 2 dBi; 1710 – 2200 MHz, 1 dBi



824 – 960 MHz;
1710 – 2200 MHz

2 dBi

Increase
x Mb/s

Omni-
Directional

4G
LTE

IP 66

-10°C to +55°C

Fire Resistant

- **Wideband omni-directional antenna**
- **Linearly polarized**
- **Robust design for indoor and outdoor use (IP 66)**
- **Vandal and water resistant**
- **Meets the stringent electrical requirements for RFID applications**



Urban



Rural/Farm

APPLICATION AREAS

Product Overview

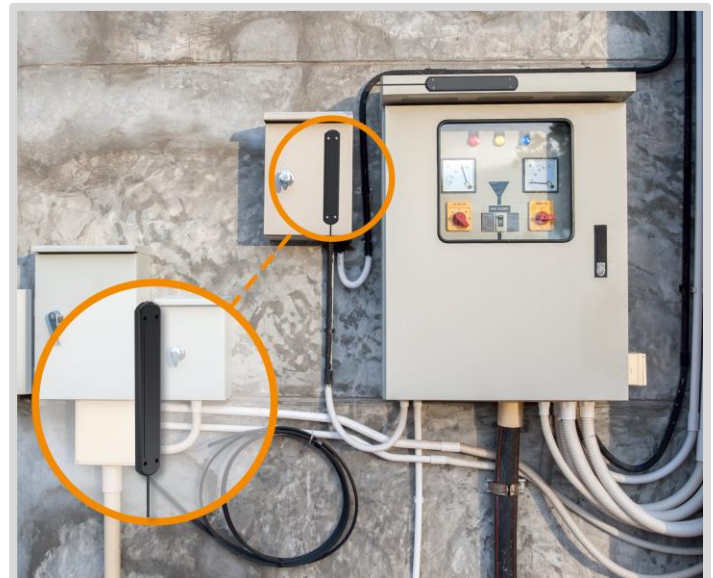
The DIPL-1 is a wideband 2G, 3G or 4G/LTE antenna, which gives a strong connection for faster transfer speeds for your broadband modem or router. The antenna is vertically polarized and with an omni-directional radiation pattern. The antenna can be fitted directly on any equipment that uses an SMA connector. The antenna is encapsulated in a soft flexible plastic moulding that offers protection from the environment. The antenna is IP 66 rated, which ensures that it is suitable for indoor and outdoor use.

Features

- Omnidirectional antenna
- Linearly polarised
- Wideband frequency range
- Operation is independent of the ground plane
- Easy installation
- Low VSWR

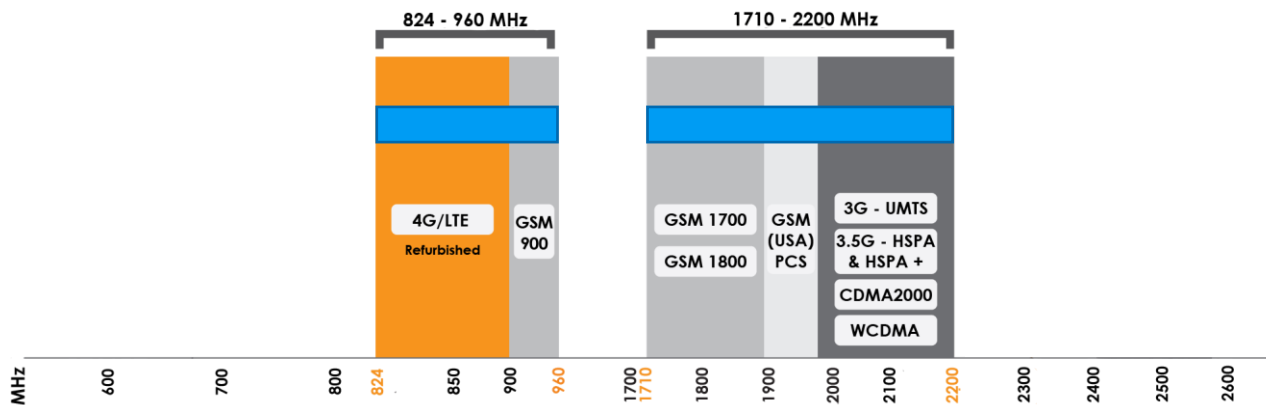
Application Areas

- Areas with poor GSM-800 and GSM-900 coverage
- Indoor GSM applications
- Rural and urban environments
- Operator agnostic
- RFID reader applications



Frequency Bands

The DIPL-1 antenna works from 824 – 960 MHz | 1710 – 2200 MHz



Indicates the LTE bands on which DIPL-1 works

Antenna Derivatives

Product Order Code (SKU)	A-DIPL-0001-01	A-DIPL-0001-06	A-DIPL-0001-11
Coax Cable Type	RG 174	RG 174	RG 174
Coax Cable Length	2 m	2 m	1.9 m
Connector Type	MMCX (M)	Fakra	RA MCX (M)
Antenna Weight	0.015kg	0.015kg	0.013kg
Packaged Weight	0.062kg	0.062kg	0.060kg
EAN	6009693810570	6009693810631	6009693810983

Electrical Specifications

Frequency bands:	824 – 960 MHz 1710 – 2200 MHz
Gain (max):	2 dBi @ 824-960 MHz 1 dBi @ 1710-2200 MHz
VSWR:	≤2.5:1
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Linear Vertical
Coax cable loss:	0.92 dB/m @ 900 MHz 1.35 dB/m @ 1800 MHz 1.4 dB/m @ 2000 MHz
DC short:	No

Product Box Contents

Antenna:	A-DIPL-0001
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Mechanical Specifications

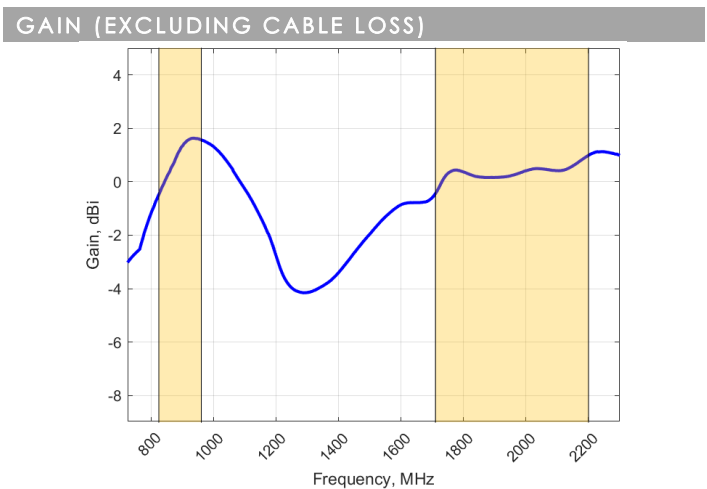
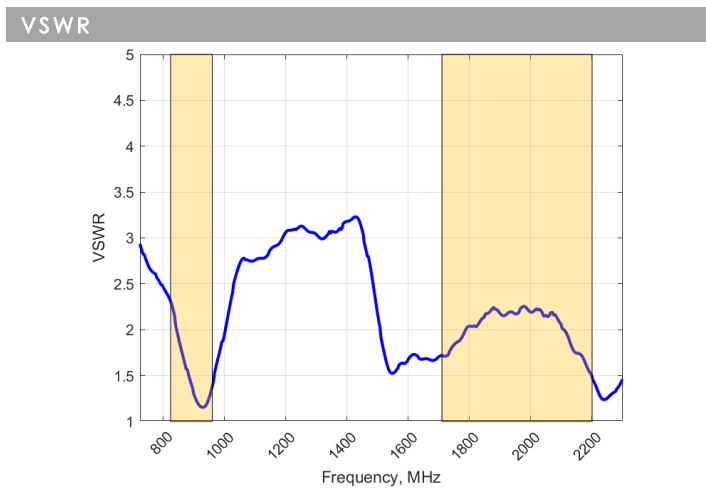
Product dimensions	160 mm x 26 mm x 10 mm
Packaged dimensions:	170 mm x 30 mm x 45 mm
Radome material:	TPE
Radome colour:	Black
Mounting Type:	Adhesive strip

Environmental Specifications, Certification & Approvals

Wind Survival:	≤160 km/h
Temperature Range (Operating):	-40°C to +70°C
Environmental Conditions:	Outdoor/Indoor
Water ingress protection ratio/standard:	IP 66
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 10
Product Safety & Environmental:	Complies with CE and RoHS standards



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

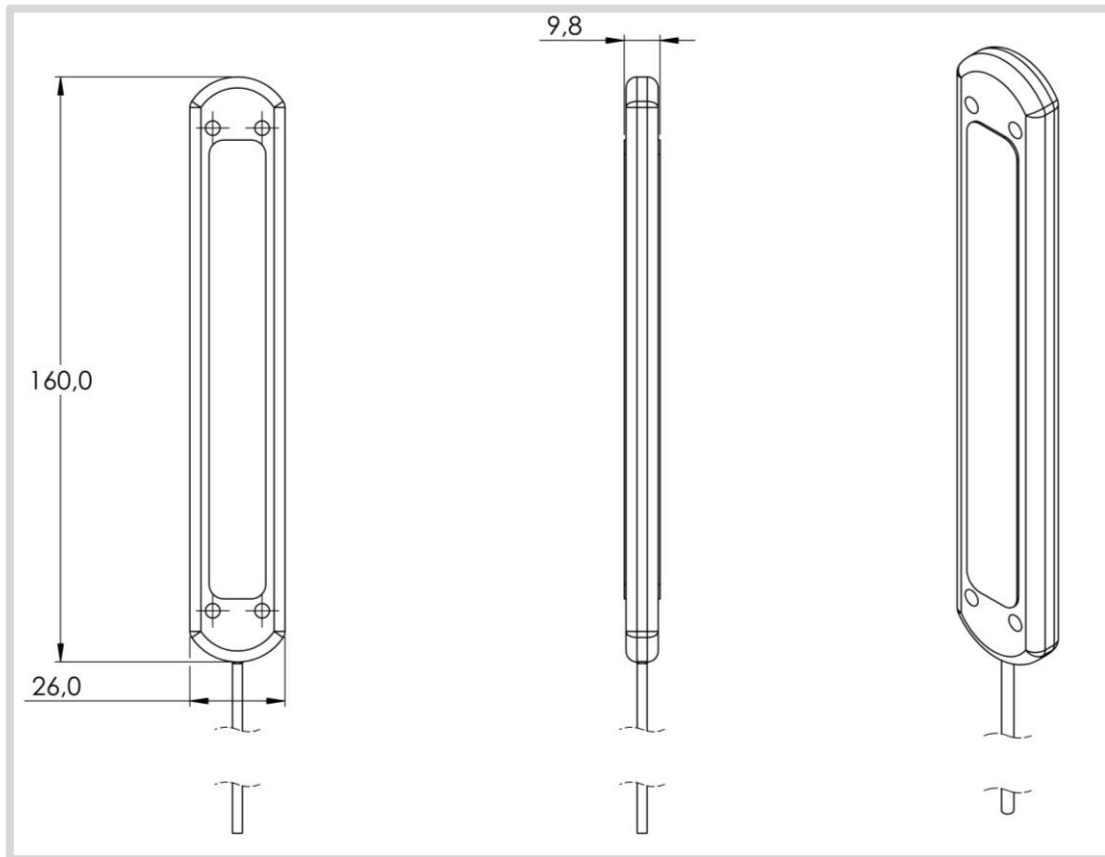
Gain* in dBi

2 dBi is the peak gain across all bands from 824 – 2200 MHz

Gain @ 824 – 960 MHz:	2 dBi
Gain @ 1710 – 2200 MHz:	1 dBi

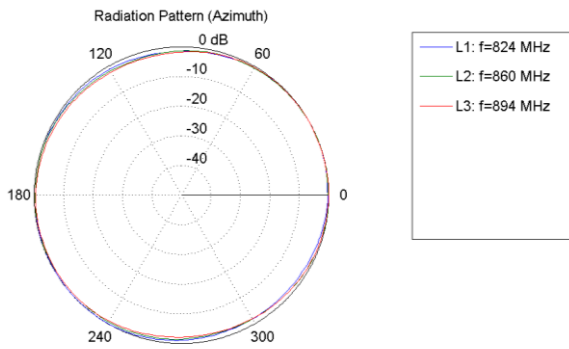
**Antenna gain measured with polarisation aligned standard antenna*

Technical Drawings

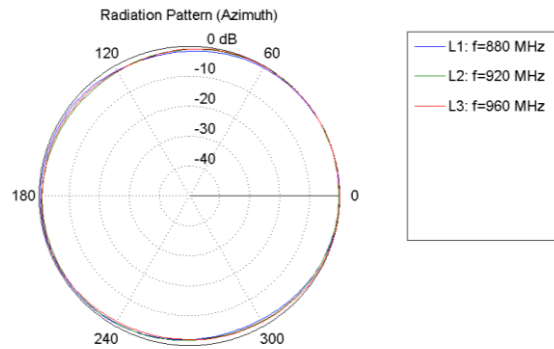


Radiation Patterns

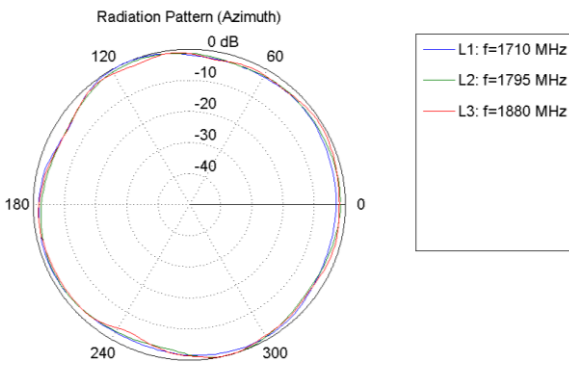
Azimuth: 824 – 894 MHz



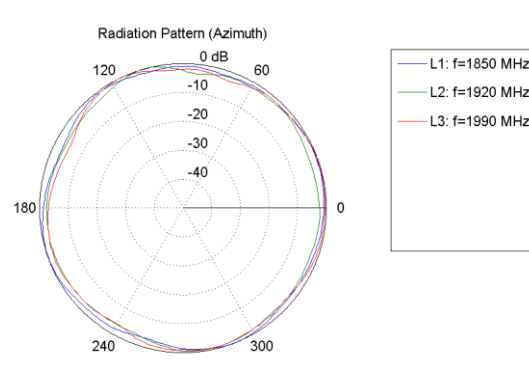
Azimuth: 880 – 960 MHz



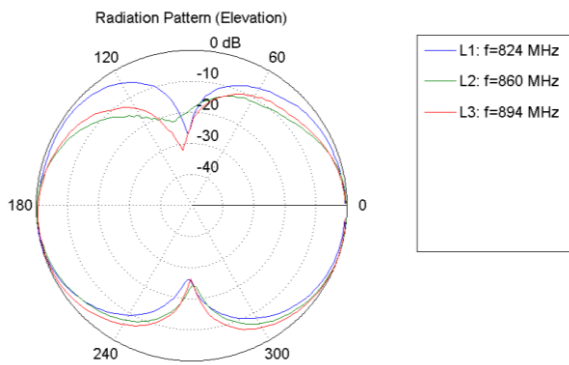
Azimuth: 1710 – 1880 MHz



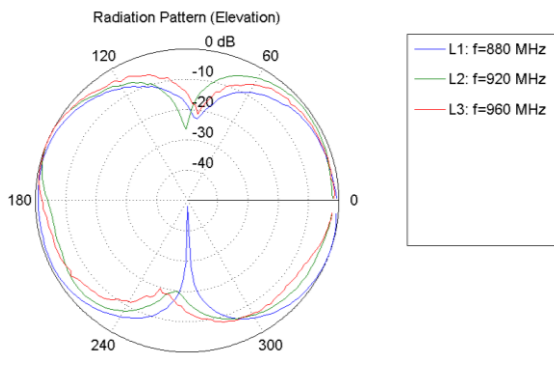
Azimuth: 1850 – 1990 MHz



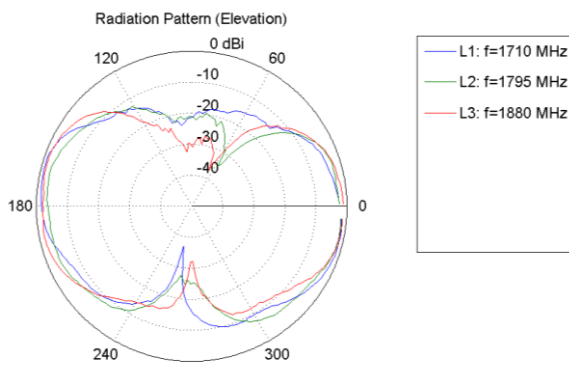
Elevation: 824 – 894 MHz



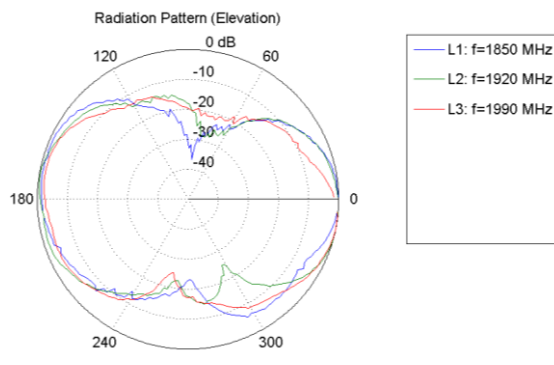
Elevation: 880 – 960 MHz



Elevation: 1710 – 1880 MHz



Elevation: 1850 – 1990 MHz



Additional Accessories

See accessories technical specifications on www.poynting.tech

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