

PATCH-26

ANTENNAS | PATCH-26 SERIES

UNI-DIRECTIONAL, RFID PATCH ANTENNA

820 - 970 MHz, 8 dBi



820 – 970 MHz	8 dBi	Increase x Mb/s	Uni-Directional	Machine to Machine	IoT
-20°C to +70°C	Fire Resistant	IP 65			

- **Medium gain, directional antenna**
- **High performance narrow band antenna**
- **Covers GSM 800 and GSM 900 bands**
- **Linearly polarised**
- **Robust enclosure design**
- **Vandal and water resistant (IP65)**
- **Meets the stringent electrical requirements for RFID applications**



APPLICATION AREAS

Product Overview

The PATCH-26 antenna covers both EU and USA RFID bands. The antenna has been designed to be water resistant and is easy to install. It is circularly polarised for reading in any orientation. The antenna is linearly polarised and can also be used to improve indoor GSM coverage. VSWR is typically less than 1.4:1, giving a return loss better than 20dB. This antenna is unique in the RFID environment because of its VSWR & gain specifications.

Features

- Medium gain, directional antenna
- Linearly polarised
- Robust enclosure design
- Low VSWR < 1.4:1 over RFID band
- Easy to install

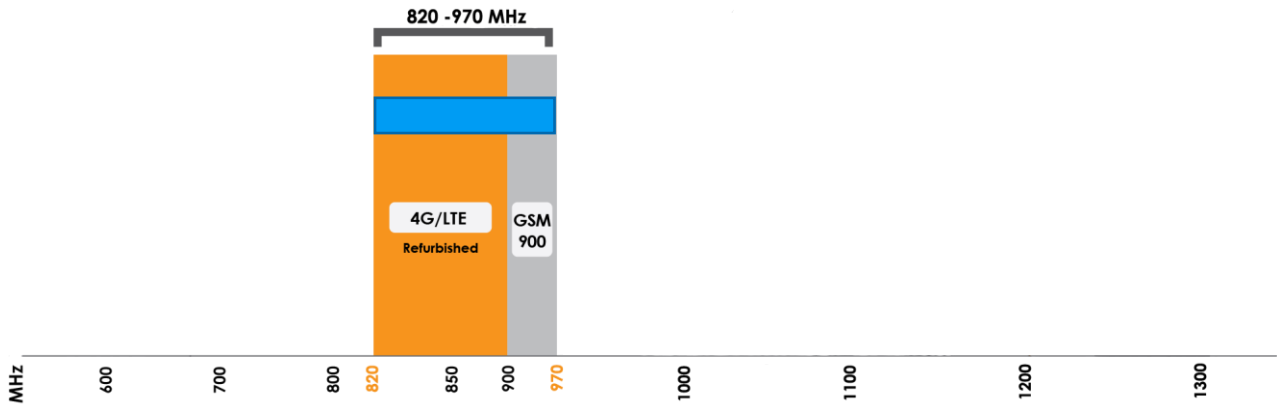
Application Areas

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



Frequency Bands

The PATCH-26 is an RFID antenna that works from 820 – 970 MHz



Indicates the bands on which PATCH-26 works

Antenna Overview

Ports	1
SISO / MIMO	SISO
Frequency Bands	820 – 970 MHz
Polarisation	Linear
Peak Gain	8 dBi
Coax Cable Type	HDF 195
Coax Cable Length	0.3m
Connector Type	N-Type (F)

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

Electrical Specifications

Frequency bands:	820 – 970 MHz
Gain (max):	8 dBi
VSWR:	<1.4:1 over 80% of the band
Feed power handling:	10 W
Input impedance:	50 Ohm (nominal)
Polarisation:	Linear
Coax cable loss:	0.385 dB/m @ 900 MHz
DC short:	Yes

Product Box Contents

Antenna:	A-PATCH-0026
Mounting bracket:	Pole mount bracket

Ordering Information

Commercial name:	PATCH-26
Order product code:	A-PATCH-0026
EAN number:	6009693810020

Mechanical Specifications

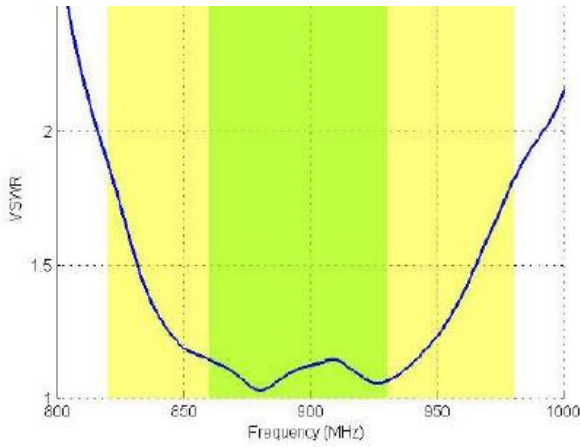
Product dimensions	250 mm x 250 mm x 40 mm
Packaged dimensions:	335 mm x 250 mm x 95 mm
Weight:	0.57 kg
Packaged weight:	0.75 kg
Radome material:	ABS (Halogen Free)
Radome colour:	Pantone – Cool Gray (1C) RAL - 7047
Mounting Type:	Pole

Environmental Specifications, Certification & Approvals

Wind Survival:	<160 km/h
Temperature Range (Operating):	-20°C to +70°C
Environmental Conditions:	Outdoor/Indoor
Water ingress protection ratio/standard:	IP 65
Salt Spray:	MIL-STD 810F/ASTM B117
Operating Relative Humidity:	Up to 98%
Storage Humidity:	5% to 95% - non-condensing
Storage Temperature:	-20°C to +70°C
Enclosure Flammability Rating:	UL 94-HB
Impact resistance:	IK 08
Product Safety & Environmental:	Complies with CE and RoHS standards

Antenna Performance Plots

VSWR

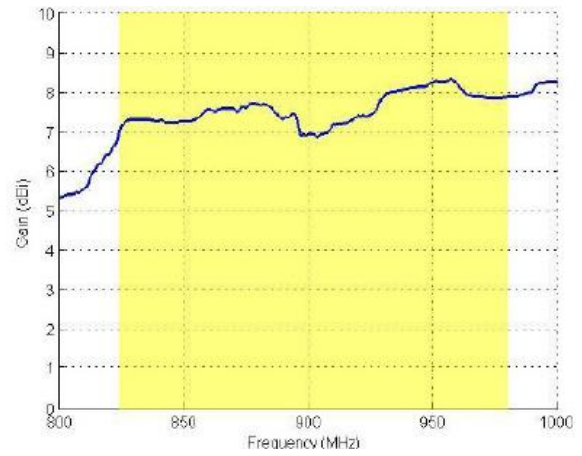


Voltage Standing Wave Ratio (VSWR)

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 PATCH-26 delivers superior performance across all bands with a VSWR of 1.4:1 or better across 80% of the bands.

GAIN (EXCLUDING CABLE LOSS)



Gain* in dBi

8 dBi is the peak gain across all bands from 820 – 970 MHz

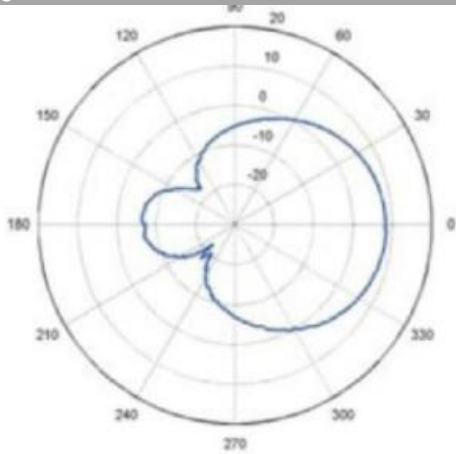
Gain @ 820 – 970 MHz:

8 dBi

*Antenna gain measured with polarisation aligned standard antenna

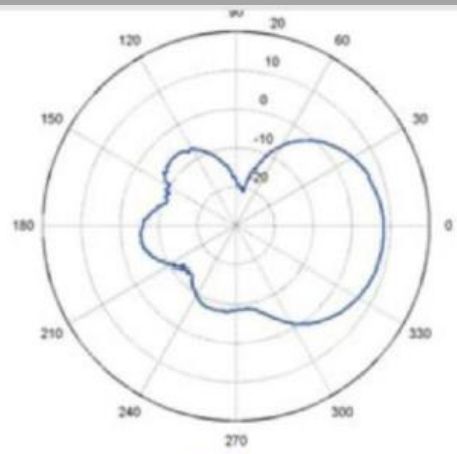
Radiation Patterns

H-Plane



H-Plane

E-Plane



E-Plane

Additional Accessories

Extension cables: Up to 15m HDF 195

Various connectors available

Installation poles and brackets available

See accessories technical specifications on www.poynting.tech

Contact Poynting

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