

ANTENNAS | PATCH-25 SERIES

UNI-DIRECTIONAL, RFID PATCH ANTENNA

860 - 960 MHz; 8.8 dBic



860 - 960 MHz



8.8 dBic



Increase
X Mb/s



Uni-Directional



Machine to
Machine



IP 65



Fire Resistant



-40°C to +80°C

- Uni-directional antenna
- Circularly polarised
- Covers GSM-800 and GSM-900 bands
- Robust enclosure design
- Vandal and water resistant (IP 65)
- Meets the stringent electrical requirement for RFID applications



Urban



Rural/Farm

APPLICATION AREAS

Product Overview

The PATCH-25 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. Due to its circular polarisation it can also be used to improve indoor GSM coverage. VSWR is typically less than 1.3:1, 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
- Circularly polarised
- Operation is independent of the ground plane
- Easy to install
- VSWR < 1.3:1

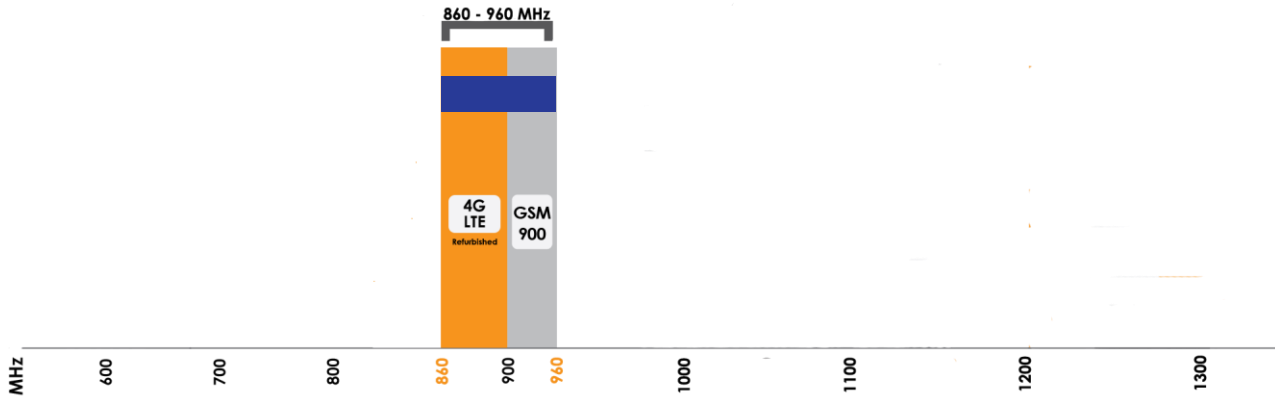
Application Areas

- 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-25 is a directional antenna that works from | 860 – 960 MHz |



Indicates the bands on which PATCH-25 works

Antenna Overview

Ports	1
SISO / MIMO	SISO
Frequency Bands	860 – 960 MHz
Polarisation	Circular (Right Hand Circular Polarised)
Peak Gain	8.8 dBic
Coax Cable Type	RG 58
Coax Cable Length	0.3 m
Connector Type	N-Type (F)

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

Electrical Specifications

Frequency Bands:	860 – 960 MHz
Gain (Max):	8.8 dBic
VSWR:	< 1.3:1
Feed Power Handling:	10 W
Input Impedance:	50 Ohm (nominal)
Coax Cable Loss:	0.535 dB/m @ 900 MHz
Polarisation:	Circular (Right Hand Circular Polarised)
DC Short:	Yes

Product Box Contents

Antenna:	A-PATCH-0025
Mounting Bracket:	N/A

Ordering Information

Commercial Name:	PATCH-25
Order Product Code:	A-PATCH-0025-V2
EAN Number:	6009693810259

Mechanical Specifications

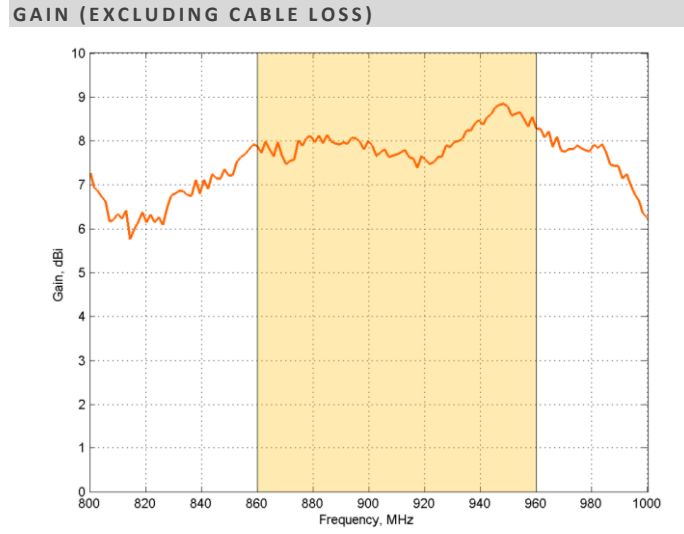
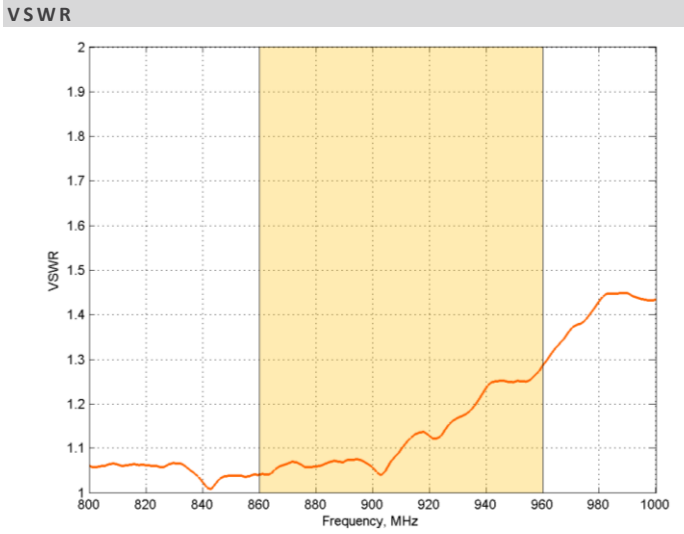
Product Dimensions	253 mm x 257 mm x 55 mm (excluding bracket)
Packaged Dimensions:	335 mm x 250 mm x 95 mm
Weight:	0.57 kg
Packaged Weight:	0.7 kg
Radome Material:	ABS (Halogen Free)
Radome Colour:	Pantone – Cool Gray (1C) RAL - 7047
Mounting Type:	Pole

Environmental Specifications, Certification & Approvals

Antenna Wind Survival:	≤160 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



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.

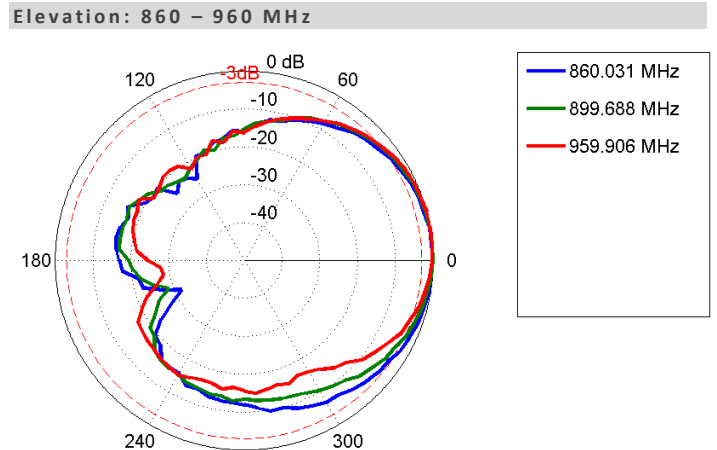
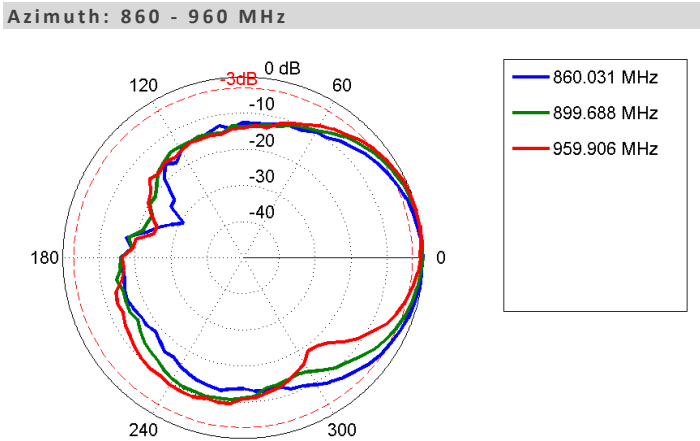
The PATCH-25 delivers superior performance across all bands with a VSWR of <1.3:1.

Gain* in dBiC

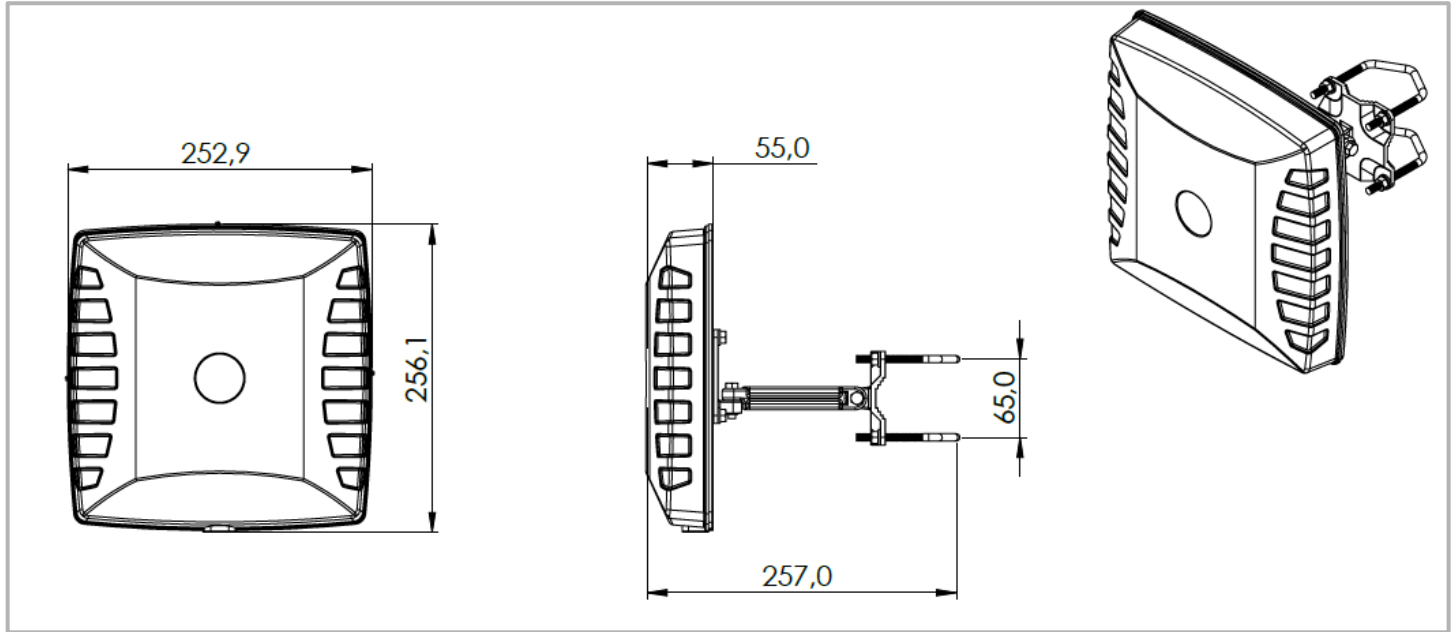
8.8 dBiC is the peak gain across all bands from 860 – 960 MHz

** Antenna gain measured with circular polarised standard antenna*

Radiation Patterns



Technical Drawings



Mounting Options



Pole Mount

Pole mounted using the provided bracket.

Additional Accessories

Extension Cables: Up to 15m RG58
Various connectors available
Installation poles and brackets available

See accessories technical specifications on www.poynting.tech

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