# PATCH-26



**ANTENNAS | PATCH-26 SERIES** 

# UNI-DIRECTIONAL, RFID PATCH ANTENNA

820 - 970 MHz, 8 dBi







8 dBi









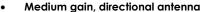






IP 65





- 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



#### **Product Overview**

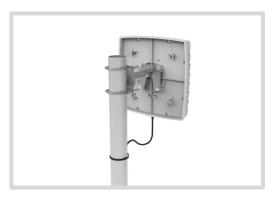
The PATCH-26 antenna covers both EU and USA RFID bands. The antenna has been designed to be water resistant and is easy to install. It is circularly polarised for reading in any orientation. The antenna is linearly polarised and can also be used to improve indoor GSM coverage. VSWR is typically less 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

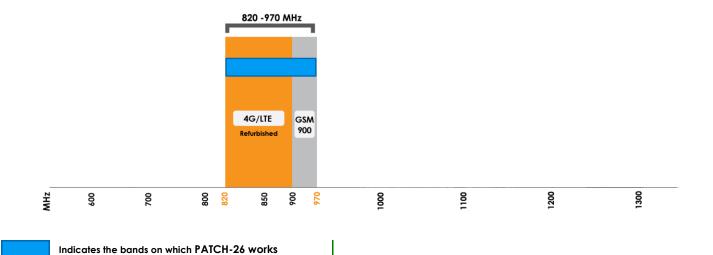






# Frequency Bands

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



#### **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)

<sup>\*</sup>The coax cable & connector are factory mounted to the antenna



**Electrical Specifications** 

820 – 970 MHz Frequency bands:

8 dBi Gain (max):

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

Weiaht: 0.57 ka

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





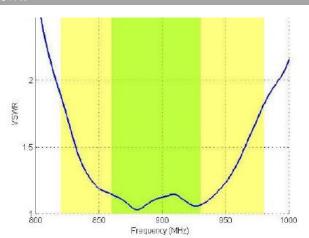




8 dBi

#### **Antenna Performance Plots**

#### VSWR

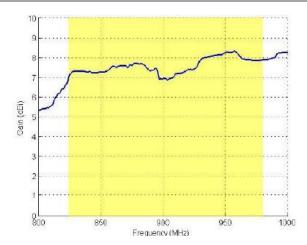


#### Voltage Standing Wave Ratio (VSWR)

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

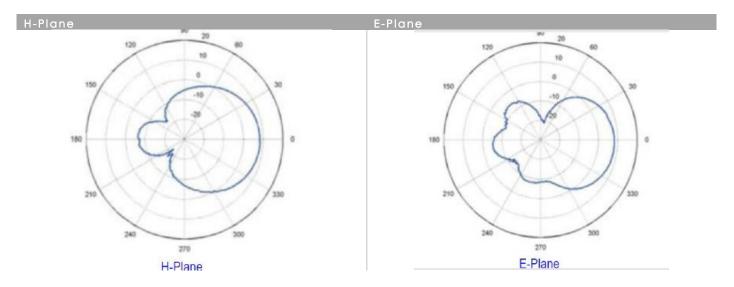
8 dBi is the peak gain across all bands from 820 – 970 MHz

Gain @ 820 – 970 MHz:

\*Antenna gain measured with polarisation aligned standard antenna



## **Radiation Patterns**





#### **Additional Accessories**

Extension cables: Up to 15m HDF 195

Various connectors available

Installation poles and brackets available

See accessories technical specifications on  $\underline{\mathsf{www.poynting.tech}}$ 

# **Contact Poynting**

Poynting Antennas (Pty) Ltd - Head Office Unit 4, N1 Industrial Park

Landmarks Avenue, Samrand, 0157 South Africa

**Phone:** +27 (0) 12 657 0050 **E-mail:** sales@poynting.co.za

## **Poynting Europe**

Regus Business Center Neue Messe Riem Kronstadter Straße 4 81677 München Germany

**Phone:** +49 89 208026538

**E-mail:** sales-europe@poynting.tech