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PCTEL PCTHPMIMO-3-SF Coach 3X3 MIMO Dual-Band WiFi Stud Antenna

Product Code

PCTHPMIMO-3-SF

Polarisation

3x3 MIMO

Design Type

Combination Planar

Application Category

IoT/M2M

RF Category

WiFi

The PCTHPMIMO-SF platform enables high data rate connectivity for fleet, rail, mass transit, public safety, and M2M applications. Each low-profile antenna model supports dual-band 2.4/5 GHz MIMO for 802.11n and 802.11ac WLAN standards, combining multiple antenna elements into one IP67-rated housing. A single stud mount cable exit simplifies permanent installations. Black or white radome options are available. This platform is also available in magnetic mount configurations.

The antenna's metal 1-inch stud mount with slotted jam nut provides single cable exit for easier installation and/or antenna replacement. Its IP67 compliant design provides maximum protection against water or dust ingress under severe environmental conditions.

Contour matching, conformable, thermoplastic-elastomer gasket designed to seal between radome and baseplate. Gasket flexes and conforms to contoured surfaces. Baseplate has a 3M™ VHB mounting pad for anti-rotation.

- 2.4 + 5 GHz WiFi 3X3 MIMO
- Multi-band, 2.3 to 2.8 GHz and 4.9 to 5.9 GHz frequencies
- Three low loss cables (three dual-band elements)
- Metal 3/4-inch stud mount with slotted jam nut provides single cable exit
- IP67 compliant design provides maximum protection against water or dust ingress
- UV-resistant black or white housing options

▼ Antenna Technical Data

Physical Characteristics

Construction Material	ABS Plastic Polycarbonate (PC)	RF Connections	3
Radome Colour	Other - Black	Environmental Rating	IP67
Dimensions	89.7 x 136.5 mm (H x ø)	Operating Temperature	-40 °C to 80 °C
Weight	No Data	Mounting	Metal 3/4-inch stud

▼ WiFi MIMO-1 Element

Electrical Specifications		Mechanical Specifications	
Input Impedance	50 Ω	Input Connector	RP-SMA
Polarisation	Vertical (V)	Input Connector Gender	-
Max. Input Power	25 W	Cable Series	LMR-195
PIM, 3rd Order	-	Cable Length	5180 mm

▼ Range: 2300 to 2800 MHz

Peak Gain	1.50 dBi	Azimuth Beamwidth	360°
VSWR	1.8:1	Elevation Beamwidth	30°
Radiation Efficiency	No Data	Electrical Tilt	0°
Front-to-Back Ratio	-	Inter-Port Isolation	> 23 dB
Cross-Polar Discrimination	-	Cross-Polar Isolation	-

▼ Range: 4900 to 5900 MHz

Peak Gain	0.50 dBi	Azimuth Beamwidth	360°
VSWR	1.8:1	Elevation Beamwidth	25°
Radiation Efficiency	No Data	Electrical Tilt	0°
Front-to-Back Ratio	-	Inter-Port Isolation	> 26 dB
Cross-Polar Discrimination	-	Cross-Polar Isolation	-

▼ WiFi MIMO-2 Element

Electrical Specifications		Mechanical Specifications	
Input Impedance	50 Ω	Input Connector	RP-SMA
Polarisation	Vertical (V)	Input Connector Gender	Male
Max. Input Power	25 W	Cable Series	LMR-195
PIM, 3rd Order	-	Cable Length	5180 mm

▼ Range: 2300 to 2800 MHz

Peak Gain	1.50 dBi	Azimuth Beamwidth	360°
VSWR	1.8:1	Elevation Beamwidth	30°
Radiation Efficiency	No Data	Electrical Tilt	0°
Front-to-Back Ratio	-	Inter-Port Isolation	> 23 dB
Cross-Polar Discrimination	-	Cross-Polar Isolation	-

▼ Range: 4900 to 5900 MHz

Peak Gain	0.50 dBi	Azimuth Beamwidth	360°
VSWR	1.8:1	Elevation Beamwidth	25°
Radiation Efficiency	No Data	Electrical Tilt	0°
Front-to-Back Ratio	-	Inter-Port Isolation	> 26 dB
Cross-Polar Discrimination	-	Cross-Polar Isolation	-

▼ WiFi MIMO-3 Element

Electrical Specifications		Mechanical Specifications	
Input Impedance	50 Ω	Input Connector	RP-SMA
Polarisation	Vertical (V)	Input Connector Gender	Male
Max. Input Power	25 W	Cable Series	LMR-195
PIM, 3rd Order	-	Cable Length	5180 mm

▼ Range: 2300 to 2800 MHz

Peak Gain	1.50 dBi	Azimuth Beamwidth	360°
VSWR	1.8:1	Elevation Beamwidth	30°
Radiation Efficiency	No Data	Electrical Tilt	0°
Front-to-Back Ratio	-	Inter-Port Isolation	> 23 dB
Cross-Polar Discrimination	-	Cross-Polar Isolation	-

▼ Range: 4900 to 5900 MHz

Peak Gain	0.50 dBi	Azimuth Beamwidth	360°

VSWR	1.8:1	Elevation Beamwidth	25°
Radiation Efficiency	No Data	Electrical Tilt	0°
Front-to-Back Ratio	-	Inter-Port Isolation	> 26 dB
Cross-Polar Discrimination	-	Cross-Polar Isolation	-

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