

High Performance Multiband Mobile MIMO Antennas

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.



PCTHPMIMO-SF Platform

Features

- Multiband coverage of 2.3-2.8 GHz and 4.9-5.9 GHz frequencies
- Dual-band integrated elements terminated with high performance, low loss RG-58/U stranded cable and high quality connector for maximum RF system efficiency
- Metal stud mount with slotted jam nut provides single cable exit for easier installation and/or antenna replacement
- Attractive low profile design for maximum installation flexibility without antenna orientation restrictions
- IP67 compliant design with custom overmolded gasket provides maximum protection against water or dust ingress under severe environmental conditions, when properly installed on a vehicle's surface
- UV resistant black or white housing options complement most vehicular aesthetic requirements

General Specifications

Maximum Power:	25 watts
Polarization:	Vertical, linear
Nominal Impedance:	50 ohms
Housing Color:	White
Housing Material:	PC/ABS, UV rated for outdoor use
Mount Method:	1-inch hole (25.4 mm) slotted stud mount with 3/4-16 UNF slotted hex-nut
Coax:	PCTHPMIMO-4-SF: Four (4) 17-foot Pro-Flex Plus 195 stranded cable leads PCTHPMIMO-3-SF: Three (3) 17-foot Pro-Flex Plus 195 stranded cable leads PCTHPMIMO-2-SF: Two (2) 17-foot Pro-Flex Plus 195 stranded cable leads
Connector(s):	Reverse Polarity SMA Male

Electrical Specifications

Model	Frequency Ranges	VSWR	In-Band Isolation Between Elements	Nominal Gain*	E-Plane Beamwidth	MIMO Elements
PCTHPMIMO-4-SF	2.3-2.8 GHz 4.9-5.9 GHz	< 1.8:1	23 dB 26 dB	1.5 dBi 0.5 dBi	30° 25°	4
PCTHPMIMO-3-SF	2.3-2.8 GHz 4.9-5.9 GHz	< 1.8:1	23 dB 26 dB	1.5 dBi 0.5 dBi	30° 25°	3
PCTHPMIMO-2-SF	2.3-2.8 GHz 4.9-5.9 GHz	< 1.8:1	23 dB 26 dB	1.5 dBi 0.5 dBi	30° 25°	2

Mechanical Specifications

Model	Dimensions (OD x H)	Housing Color**
All Models	5.4 x 2.7 inches (137 x 67 mm)	White (black gasket)

Environmental Specifications

Model	Operating Temperature	Storage Temperature	Ingress Protection	Humidity
All Models	-40° to +80° C	-50° to +85° C	IP67***	95%

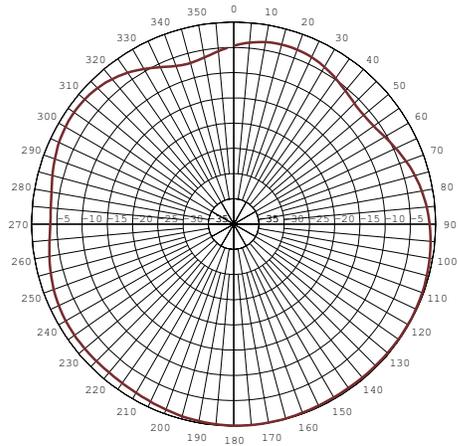


* Measured at the end of the coax

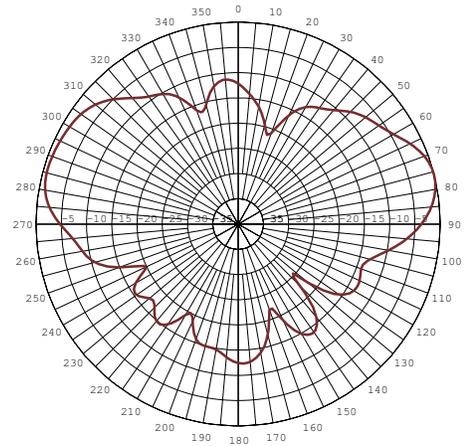
** Antennas each have black and white color options. To order the black model, please add a "B" before the model number.

*** When properly installed on rooftop surface, according to PCTEL installation instructions

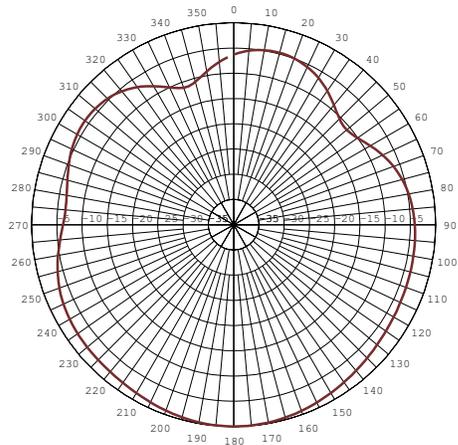
**Azimuth Pattern
2300 MHz**



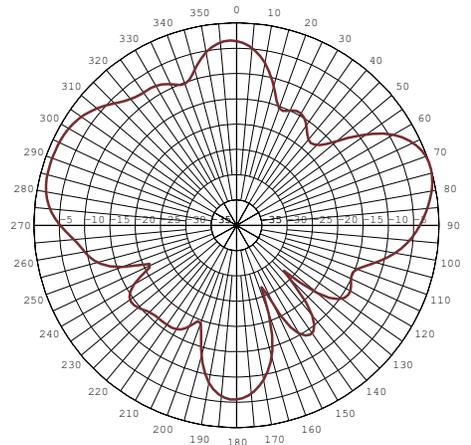
**Elevation Pattern
2300 MHz**



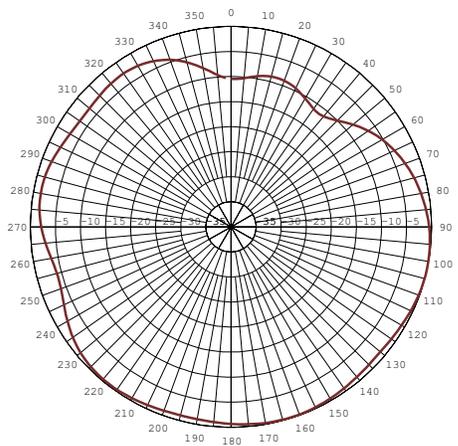
**Azimuth Pattern
2500 MHz**



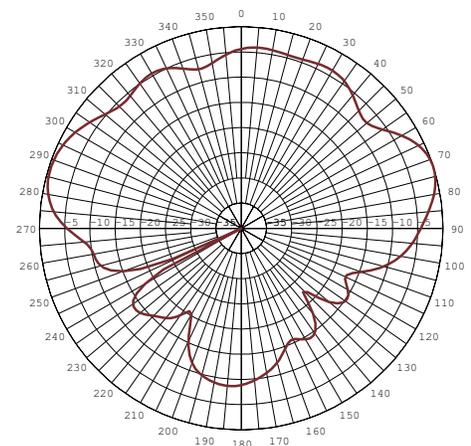
**Elevation Pattern
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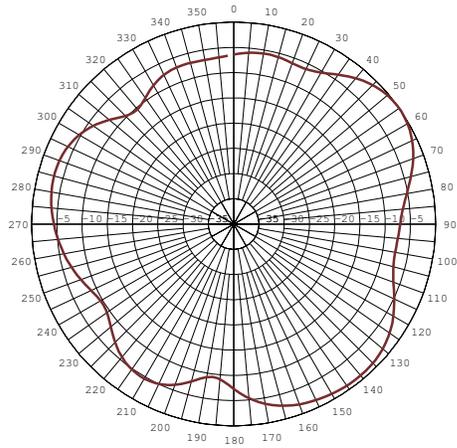
**Azimuth Pattern
2800 MHz**



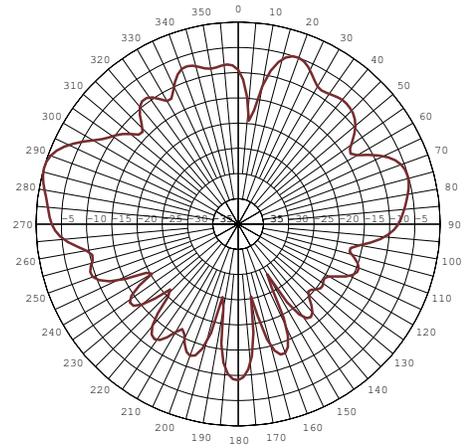
**Elevation Pattern
2800 MHz**



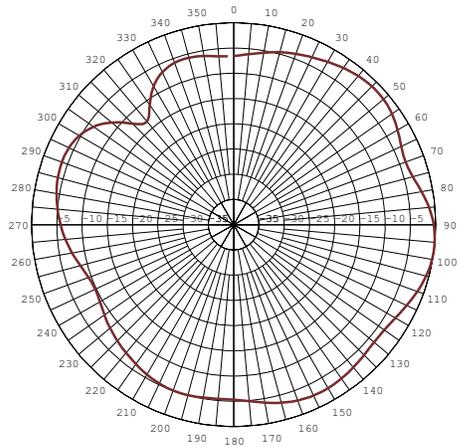
**Azimuth Pattern
4900 MHz**



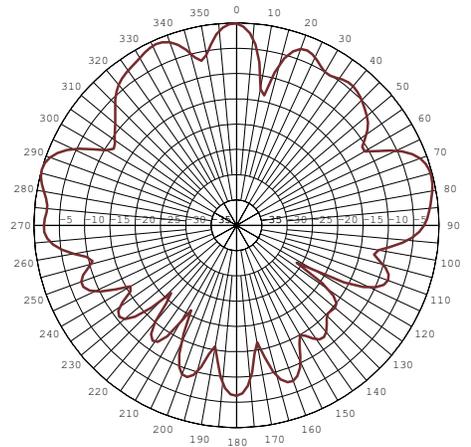
**Elevation Pattern
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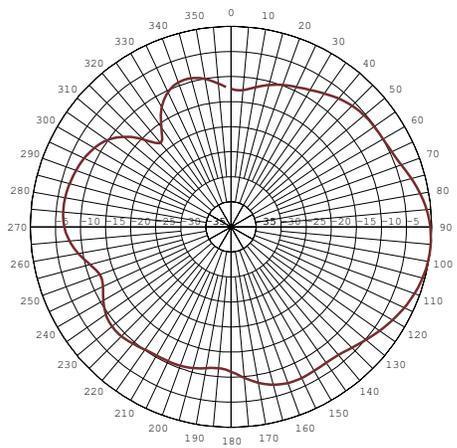
**Azimuth Pattern
5400 MHz**



**Elevation Pattern
5400 MHz**



**Azimuth Pattern
5800 MHz**



**Elevation Pattern
5800 MHz**

