

A large, thick blue circle is positioned on the left side of the page, partially overlapping a light blue circular area. The light blue area is a large circle that is mostly cut off by the left edge of the frame. A dark blue horizontal band crosses the middle of the light blue circle.

IN-BUILDING ANTENNAS

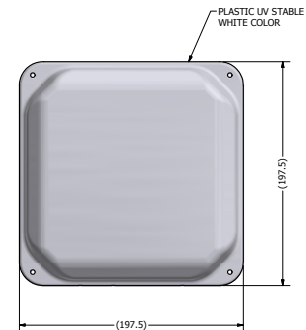
Ultra-Flat Ceiling Mount CBRS Antenna



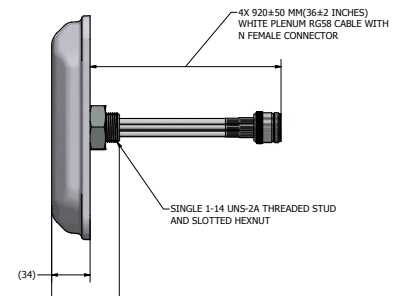
The PCTHP-CBRS-4-NF is a wideband/multi-band omnidirectional antenna for indoor ceiling mount installations. The antenna is designed to operate within the frequency ranges of 3400 MHz to 4200 MHz, providing optimized pattern coverage for indoor network applications.

Features

- Aesthetically pleasing, low-profile housing
- N Female connector termination
- Single stud mount cable exit for installation ease
- UL94 V0 listed materials and Plenum rated cable for compliance to strict building safety code specifications



PCTHP-CBRS-4-NF



STANDARD CONFIGURATION

Model	Cable	Connector	Mounting Method	Radome
PCTHP-CBRS-4-NF	Four (4) 36-inch (920 mm) white RG-58 Plenum Rated	Four (4) N Female	Ceiling Mount. Single 1.34" (34 mm) M18 x 1.0 threaded stud and plastic HEX nut. Includes four screws and wing nuts.	White, UV-resistant ABS plastic

ELECTRICAL SPECIFICATIONS

Frequency Range	Typical Gain	VSWR	Max. Power Handling	Nominal Impedance	Polarization	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
3.3-4.2 GHz	4 dBi	< 2:1	50 watts	50 ohms	Linear, vertical	360°	

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Temperature Range	Housing Material
7.88 L x 7.88 W x 1.34 H in (197.5 x 197.520 x 63.3 mm)	1.54 lbs (0.7 kg)	- 40°C to +85°C (Storage) - 30°C to +65°C (Operating)	White UV Stable Plastic

Ultra Flat Dual-Polarization LTE MIMO Ceiling Mount Antenna

The PIM160-ICM is a dual-polarization LTE MIMO antenna with ultra-low PIM (@ 2x43 dBm) for indoor ceiling mount installations. The antenna is designed to operate within the frequency ranges of 698-960 MHz and 1710-2700 MHz, providing optimized pattern coverage for indoor DAS applications.

Features

- Dual-polarization (vertical/horizontal) LTE MIMO design
- Ultra-low PIM (@ 2x43 dBm)
- 4.1-9.5 Mini DIN, 4.3-10 or N Female connector options for carrier network compliance
- Multi-band coverage with low VSWR performance
- Aesthetically pleasing, low-profile housing
- Single stud mount cable exit for installation ease
- UL94 V0 listed materials and Plenum rated cable for compliance to strict building safety code specifications



PIM160-ICM

STANDARD CONFIGURATION

Model	Cable	Connectors	Mounting Method	Radome
PIM160-ICM-4.3	7.87-inch (200mm)	Two x 4.3-10 (Female)	Ceiling Mount.	White, UV-resistant
PIM160-ICM-NF	R670-141 SXE Plenum (2 each)	Two x N Female	Single 1.34" (34 mm) M18 x 1.0 threaded stud and plastic HEX nut.	ABS plastic

ELECTRICAL SPECIFICATIONS

Frequency Range	Average Peak Gain	VSWR	Port-to-Port Isolation
698-806 MHz /	3.4 dBi	≤ 1.8	≤ -17 dB
806-960 MHz /	3.4 dBi	≤ 1.6	≤ -17 dB
1710-2700 MHz	5.9 dBi	≤ 1.5	≤ -25 dB

ELECTRICAL SPECIFICATIONS, continued

Power Handling	Nominal Impedance	Polarization	Azimuth Half Power Beamwidth	PIM Rating 3rd Order, 2 x 20 W (Typical)
50 watts (maximum)	50 ohms	Linear Horizontal/Vertical for each radiator	Omnidirectional	≤ -160 dBc each port

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Temperature Range	Material Substance
8.58 OD x 1.85 H in (21.8 x 4.7 cm)	0.45 kg	-40°C to +80°C (Storage) -30°C to +70°C (Operating)	RoHS Compliant

Ultra Flat Ceiling Mount DAS Antenna



The PIM160-ICS is a multi-band omnidirectional antenna with ultra-low PIM (@ 2x43 dBm) for indoor ceiling mount installations. The antenna is designed to operate within the frequency ranges of 698-960 MHz and 1710-2700 MHz, providing optimized pattern coverage for indoor DAS applications.

Features

- Ultra-low PIM (@ 2x43 dBm)
- 4.1-9.5 Mini DIN , 4.3-10 or N Female connector options for carrier network compliance
- Multi-band coverage with low VSWR performance
- Aesthetically pleasing, low-profile housing
- Single stud mount cable exit for installation ease
- UL94 V0 listed materials and Plenum rated cable for compliance to strict building safety code specifications



PIM160-ICS

STANDARD CONFIGURATION

Model	Cable	Connector	Mounting Method	Radome
PIM160-ICS-4.3	7.87-inch (200mm)	One x 4.3-10 (Female)	Ceiling Mount.	White, UV-resistant
PIM160-ICS-NF	R670-141 SXE Plenum	One x N Female	Single 1.34" (34 mm) M18 x 1.0 threaded stud and plastic HEX nut.	ABS plastic

ELECTRICAL SPECIFICATIONS

Frequency Range	Average Peak Gain	VSWR
698-894 MHz /	4 dBi	≤ 1.6:1
894-960 MHz /	4 dBi	≤ 1.6:1
1710-2180 MHz /	6.5 dBi	≤ 1.6:1
2180-2700 MHz	7 dBi	≤ 1.6:1

ELECTRICAL SPECIFICATIONS, continued

Power Handling	Nominal Impedance	Polarization	Azimuth Half Power Beamwidth	PIM Rating 3rd Order, 2 x 20 W (Typical)
50 watts (maximum)	50 ohms	Linear, vertical	Omnidirectional	≤ -160 dBc

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Temperature Range	Material Substance
9.8 OD x 1.3 H in (25 x 3.4 cm)	0.45 kg	-40°C to +80°C (Storage) -30°C to +70°C (Operating)	RoHS Compliant

VenU® Dual-Band MIMO Omnidirectional Antenna



These VenU antennas are omnidirectional, operating at both the 2.4 GHz and the 5 GHz bands. They are designed to support access points offering 802.11n, ac coverage. The antennas are suitable for both indoor and outdoor installations, and include mounting hardware for wall/mast or ceiling mount applications, depending on model.

Features

- Omnidirectional antenna for indoor or outdoor operation
- Operates over the entire 2.4 and 5 GHz band
- MIMO enclosure - three, four, or six antennas in the same housing
- White UL94 V0 radome
- Plenum rated, outdoor capable coaxial cables
- Azimuth and elevation plane adjustable wall or mast mount
- Ceiling mounting capable



MPMI2458-4-RPC

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
MPMI2458-4-RPC	Four 36 in (91.4 cm) Plenum Rated, UV-stable RG-58/U Leads	Four Reverse Polarity TNC (Male) ANSI 7/16-28 UNEF 2B threads	1.5-inch stud mount. Universal wall and mast mountable with included articulating mount. All tools and hardware included. Mounts to mast up to 1-1/2" in diameter. Ceiling mountable to 1-inch thick ceiling tile with jam nut. Also includes rubber washer for mounting to smooth surfaces such as NEMA enclosures. (All Models)
MPMI2458-6-RPSMA	Six 36 in (91.4 cm) Plenum Rated, UV-stable RG-58/U Leads	Six Reverse Polarity SMA (Male)	
MPMI2458-3-RPSMA	Three 36 in (91.4 cm) Plenum Rated, UV-stable RG-58/U Leads	Three Reverse Polarity SMA (Male)	
MPMI2458-3-RPC	Three 36 in (91.4 cm) Plenum Rated, UV-stable RG-58/U Leads	Reverse Polarity TNC male	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain*	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
MPMI2458-4-RPC	2.4-2.5 GHz, 4.9-5.9 GHz	4 dBi, 4 dBi	2.0:1	Omnidirectional	60°, 33°
MPMI2458-6-RPSMA	2.4-2.5 GHz, 4.9-5.9 GHz	5 dBi, 7 dBi	2.0:1	Omnidirectional	25°, 15°
MPMI2458-3-RPSMA	2.4-2.5 GHz, 4.9-5.9 GHz	5 dBi, 7 dBi	2.0:1	Omnidirectional	25°, 15°
MPMI2458-3-RPC	2.4-2.5 GHz, 4.9-5.9 GHz	5 dBi, 7 dBi	2.0:1	Omnidirectional	25°, 15°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued (ALL MODELS)

Average Power	Nominal Impedance	Polarization
50 watts	50 ohms	Linear, vertical

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Housing Material	Ingress Protection	Temperature Range
8.6 H x 6.3 OD in (21.8 x 16.0 cm)	PC (UV-stabilized)	IP-54	Operating: -22°F to +158°F (-30°C to +70°C), Storage: -40°F to +185°F (-40°C to +85°C)

* Peak Gain includes 3 ft cable.

Miniature Ceiling Mount Dual-Band Antenna



The miniature ceiling mount omnidirectional antenna provides high performance wideband coverage of 2.4 GHz and 5 GHz Wi-Fi bands without tuning. It is designed for minimum visibility in ceiling mount in-building installations. The antenna's tiny footprint provides minimum visibility on a ceiling tile installation.

Features

- Miniature design is virtually invisible for indoor installations with strict aesthetic requirements
- Dual-band 2.5/5 GHz Wi-Fi frequencies
- Simple screw mount installation
- Excellent gain performance with a low VSWR



MCM124583RPSMA

STANDARD CONFIGURATION

Model	Connector	Mount
MCM124583RPSMA	RP SMA Plug	Holes are provided for mounting to a flat ceiling with plastic screws (included)

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
2.3-6.0 GHz	3.5 dBi	< 2.0:1	360°	70°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Average Power	Nominal Impedance	Polarization
10 watts	50 ohms	Vertical, linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Temperature Range
1.8 H x 1.2 W x .07 D in (4.6 x 3.1 x .02 cm)	0.2 oz (0.005 kg)	-40°C to +80°C



Dual-Polarization LTE MIMO Directional Wall Mount DAS Antenna

The PIM160-IPM is a dual-polarization LTE MIMO antenna with ultra-low PIM (@ 2x43 dBm) for indoor wall mount installations. The antenna is designed to operate within the frequency ranges of 698-960 MHz and 1710-2700 MHz, providing optimized pattern coverage for indoor DAS applications.

Features

- Dual-polarization (vertical/horizontal) LTE MIMO design
- Ultra-low PIM (@ 2x43 dBm)
- 4.1-9.5 Mini DIN, 4.3-10 or N Female connector options for carrier network compliance
- Multi-band coverage with low VSWR performance
- Aesthetically pleasing, low-profile housing
- Includes wall mount hardware for installation ease
- UL94 V0 listed materials and Plenum rated cable for compliance to strict building safety code specifications



PIM160-IPM

STANDARD CONFIGURATION

Model	Cable	Connector	Mounting Method
PIM160-IPM-4.3	Two 7.87-inch (200mm)	4.3-10 (Female)	Wall mount. Includes hanging plate assembly with self-tapping screws and extension pipe hardware.
PIM160-IPM-NF	R670-141 SXE Plenum (2 each)	N Female	

ELECTRICAL SPECIFICATIONS

Frequency Range	Gain	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	VSWR	Port-to-Port Isolation
698-806 MHz/	5 dBi	65°	70°	≤ 1.8	≤ -25
806-960 MHz/	5 dBi	65°	70°	≤ 1.6	≤ -25
1710-2700 MHz	8 dBi	65°	60°	≤ 1.5	≤ -25

ELECTRICAL SPECIFICATIONS, continued

Power Handling	Nominal Impedance	Polarization	Front to Back Ratio	PIM
50 watts (maximum)	50 ohms	@ 698-960 MHz: Vertical/Horizontal @ 1710-2700 MHz: ± 45°	@698-960MHz: ≥10 dB @1710-2700MHz: ≥20 dB	≤ -160 dBc

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Temperature Range	Humidity	Radome
11.6 L x 6.8 W x 2.9 H in (29.5 x 17.2 x 7.3 cm)	0.75 kg	-40°C to +80°C (Storage) -40°C to +70°C (Operating)	0%-100%	White, UV-resistant ABS plastic

Low-Profile Wall Mount DAS Antenna



The PIM160-IPS is a multi-band directional panel antenna with ultra-low PIM (@ 2x43 dBm) for indoor wall mount installations. The antenna is designed to operate within the frequency ranges of 698-960 MHz and 1710-2700 MHz, providing optimized pattern coverage for indoor DAS applications.

Features

- Ultra-low PIM (@ 2x43 dBm)
- 4.1-9.5 Mini DIN, 4.3-10 or N Female connector options for carrier network compliance
- Multi-band coverage with low VSWR performance
- Aesthetically pleasing, low-profile housing
- Includes wall mount hardware for installation ease
- UL94 V0 listed materials and Plenum rated cable for compliance to strict building safety code specifications



PIM160-IPS

STANDARD CONFIGURATION

Model	Cable	Connector	Mounting Method
PIM160-IPS-4.3	7.87-inch (200mm)	4.3-10 (Female)	Wall mount.
PIM160-IPS-NF	R670-141 SXE Plenum	N Female	Includes hanging plate assembly with self-tapping screws and extension pipe hardware.

ELECTRICAL SPECIFICATIONS

Frequency Range	Gain	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	VSWR
698-800 MHz/800-960 MHz/ 1710-2200 MHz/2200-2700 MHz	≥ 5.5 dBi	100 ± 5°	85 ± 10°	≤ 1.8
	≥ 5.5 dBi	95 ± 5°	85 ± 10°	≤ 1.6
	≥ 7 dBi	60 ± 5°	60 ± 10°	≤ 1.5
	≥ 7 dBi	55 ± 5°	50 ± 10°	≤ 1.5

ELECTRICAL SPECIFICATIONS, continued

Power Handling	Nominal Impedance	Polarization	Front to Back Ratio	PIM
50 watts (maximum)	50 ohms	Vertical	@ 698-960 MHz: ≥ 10 dB @ 1710-2700 MHz: ≥ 10 dB	≤ 160 dBc

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Temperature Range	Relative Humidity	Radome
8.1 L x 6.9 W x 1.6 H in (20.6 x 17.5 x 4.1 cm)	0.3 kg	-40°C to +80°C (Storage) -40°C to +70°C (Operating)	0%-100%	White, UV-resistant ABS plastic



VenU® Dual-Band, Six-Port MIMO Wall Mount Directional Panel Antenna

The FPMI2458-VP6RPSMA dual-band directional MIMO antenna provides spatial diversity coverage of 2.4 and 5 GHz broadband wireless frequencies in an attractive, low-profile housing. The platform was designed for outdoor installations utilizing 802.11n multi-band wireless LAN access point radios. It provides optimal coverage for venues with a large number of mobile data users.

Features

- Dual-band coverage of 2.4 GHz and 5 GHz broadband wireless frequencies
- Three 2.4 GHz and three 5 GHz integrated elements terminated with high performance, low loss Plenum cable
- Attractive low-profile radome
- Includes heavy-duty articulating mount for wall or mast mount installations
- UL94 V0 materials and Plenum rated cable for compliance with strict building code safety specifications



FPMI2458-VP6RPSMA

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
FPMI2458-VP6RPSMA	Six 39-inch RG-58PLW cables, white	Reverse Polarity SMA male	Heavy-duty articulating mount (included)

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Nominal Gain	VSWR	3 dB Azimuth Half Power Beamwidth	3 dB Elevation Half Power Beamwidth
2.4-2.5 GHz	8.5 dBi	@ 2.4 GHz: 1.5 typical, 2.0 maximum	@ 2.4 GHz: 60°	@ 2.4 GHz: 30°
5.15-5.85 GHz	6 dBi	@ 5 GHz: 1.8 typical, 2.5 maximum	@ 5 GHz: 55°	@ 5 GHz: 35°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Front to Back Ratio	Average Power	Nominal Impedance	Polarization	Port-to-Port Isolation
@ 2.4 GHz: 12 dB @ 5 GHz: 15 dB	25 watts	50 ohms	Vertical, linear	@ 2.4 GHz: 22 dB @ 5 GHz: 27 dB

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Housing Material	Ingress Protection	Temperature Range
9.8 W x 7.2 H x 2.0 D in (24.9 x 18.3 x 5 cm)	ASA, UL 94 HB plastic, off-white (paintable with non-metallic paint only)	IP67*	-40°C to +70°C

* When installed according to the manufacturer's installation instructions.

VenU® Dual-Band, 802.11 ac Sector Antennas



The FPMI34005-DP4MSMA is a compact, low profile directional panel antenna that operates at CBRS frequencies. The UV-protected radome is constructed from lightweight, durable plastic. This new antenna is ideal for indoor or outdoor installations supporting CBRS networks, including small cells and DAS.

Features

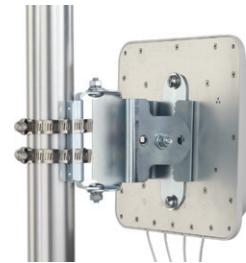
- UL 94 HB ASA radome and PC board conform to UL's high flame retardant rating, allowing maximum installation flexibility
- Meets stringent building code requirements
- Attractive, low-profile housing blends well with indoor and outdoor environments where aesthetic considerations are important
- Includes a heavy-duty articulating mounting bracket for mast or pipe installations



FPMI34005-DP4MSMA



FPM-1005 mount



STANDARD CONFIGURATION

Model	Cable	Connector	Mount
FPMI34005-DP4MSMA	Four 36-inch UL94 RG-316	Male SMA	Adjustable wall mounting bracket included

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain (Typ.)	VSWR	Azimuth Half Power Beamwidth
FPMI34005-DP4MSMA	3.3-4.2 GHz	3.5 dBi	< 2.2:1	< 110±10

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued (ALL MODELS)

Front to Back Ratio	Average Power	Port-to-Port Isolation	Nominal Impedance	Polarization
18 dB typical	20 watts	-50.9 dB @ 3.4 GHz -40.0 dB @ 3.3 GHz -45.0 dB @ 4.2 GHz	50 ohms	Vertical, linear, ± 45° slant linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Dimensions	Weight	Housing Material	Ingress Protection	Rated Wind	Operating Temperature	Storage Temperature Range
7.88 L x 7.88 W x 1.34 H in (20 x 20 x 3.4 cm)	1 lb (0.45 kg)	White UV-stable ASA	IP67*	135 mph	-40°C to +65°C	-40°C TO +85°C

VenU® MIMO Dual-Band Sector Antennas



The FPMI2458 dual-band sector antennas can be used for 802.11n, ac MIMO applications. The antennas cover both 2.4-2.5 GHz and 4.9-5.9 GHz in one radome. The radome is constructed from lightweight, durable plastic and UV-protected. The antennas can be used with a single access point to provide full dual-band 802.11n, ac MIMO coverage. The elements can also be used individually or in combination to provide diversity/nondiversity coverage with legacy 802.11n, ac access points.

Features

- UL 94 HB ASA radome and PC board conform to UL's high flame retardant rating, allowing maximum installation flexibility
- Meets stringent building code requirements
- Attractive, low-profile housing blends well with indoor and outdoor environments where aesthetic considerations are important
- Screws and anchors for wall mount included; adjustable mounting brackets sold separately
- Dual-band performance on each port



FPMI2458-DP4RPSMA

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
FPMI2458-DP4RPSMA	Four 32-inch UL94 RG-316	RPSMA Plug	Wall mount FPM-1005 adjustable mounting bracket sold separately
FPMI2458-TP3RPSMA	Three 32-inch UL94 RG-316	RPSMA Plug	Wall mount FPM-1005 adjustable mounting bracket sold separately
FPMI2458-DP2RPSMA	Two 32-inch UL94 RG-316	RPSMA Plug	Wall mount FPM-1005 adjustable mounting bracket sold separately
FPMI245865-TP3NM	Three 32-inch UL94 RG-316	N Male	Wall mount FPM-1005 adjustable mounting bracket sold separately

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
FPMI2458-DP4RPSMA	2.4-2.5 GHz, 5.1-5.9 GHz	6 dBi, 5 dBi	1.5 typical, 2.0 maximum	100°, 80°	90°, 65°
FPMI2458-TP3RPSMA	2.4-2.5 GHz, 4.9-5.9 GHz	6 dBi, 5 dBi	1.5 typical, 2.0 maximum	100°, 75°	90°, 60°
FPMI2458-DP2RPSMA	2.4-2.5 GHz, 4.9-5.875 GHz	6 dBi, 5 dBi	1.5 typical, 2.0 maximum	100°, 75°	90°, 60°
FPMI245865-TP3NM	2.4-2.5 GHz, 4.9-5.85 GHz	8 dBi, 8 dBi	1.5 typical, 2.0 maximum	70°, 60°	70°, 55°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued (ALL MODELS)

Front to Back Ratio	Average Power	Nominal Impedance	Polarization
20 dB typical	20 watts	50 ohms	Vertical, linear, ± 45° slant linear

MECHANICAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Ingress Protection	Temperature Range
7.8 L x 7.8 W x 1.3 H in (20 x 20 x 3.4 cm)	1 lb (0.45 kg)	ASA	IP67*	-40°C to +70°C

* When installed according to the manufacturer's installation instructions.

Dual-Band, Four-Port, 802.11n MIMO Directional Antenna

PCTEL's MPMI24580406-RPC dual-band, 802.11n MIMO antenna provides four-port diversity coverage of 2.4-2.5 GHz Wi-Fi and 4.9-5.9 GHz broadband wireless frequencies in an attractive, compact package. It is designed for indoor installations requiring an unobtrusive, high performance antenna.

Features

- Multi-band coverage of 2.4-2.5 GHz ISM and 4.9-5.9 GHz broadband wireless frequencies
- Four dual-band 2.4/5 GHz integrated elements terminated with high performance, low loss cable, and Reverse Polarity Male TNC connectors
- Attractive low-profile housing
- UL94 V0 listed plastic and PC boards address strict building safety codes



MPMI24580406-RPC



STANDARD CONFIGURATION

Model	Cable	Connector*	Mount
MPMI24580406-RPC	Four (4) 14-inch low loss RG-316	Four (4) Reverse Polarity Male TNC	7/8-14 UNF plastic HEX nut and flat washer included

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
2.4-2.5 GHz	4 dBi	< 2.0:1	@ 2.4 GHz: 60°	@ 2.4 GHz: 45°
4.9-5.9 GHz	7 dBi		@ 5 GHz: 50°	@ 5 GHz: 30°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Average Power	Nominal Impedance	Polarization	Port-to-Port Isolation
5 watts	50 ohms	Vertical, linear	@ 2.4 GHz: -15 dB @ 5 GHz: -15 dB

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Housing Material	Temperature Range
7.07 L x 5.07 W x 1.30 H in (17.96 x 12.88 x 3.30 cm)	PC, White Lexan 945U	-40°C to +80°C

* Other connector options available upon request



Ground Plane Independent, Low-Profile Dual-Band Wi-Fi Antenna

PCTEL's WLP2458NGP is a ground plane independent dual-band antenna for 802.11a, b, g, e Wi-Fi applications. It has a rugged, low-profile housing suitable for both indoor and outdoor installations. The antenna features IP67 ingress rating and it is terminated with a female TNC connector. Mating cable assemblies sold separately.

Features

- Ground plane independent design for maximum placement flexibility
- Dual-band performance covering 802.11 a, b, g, e standards
- UV-stable housing rated for indoor and outdoor applications
- IP67* rated prevents dust or water ingress into the antenna
- 3/4-inch through hole or bracket mount
- Optimized with a 1.5 m PFP-195 cable assembly with mating TNC male termination (sold separately). Other connector and cable length options available.



WLP2458NGP

STANDARD CONFIGURATION

Model	Connector	Mount
WLP2458NGP	TNC jack (purchase mating cable assembly separately)	¾-inch permanent through hole or bracket mount

ELECTRICAL SPECIFICATIONS

Frequency Range	Gain	VSWR	Average Power	Nominal Impedance	Polarization	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
2.4-2.5 GHz 4.9-5.9 GHz	3 dBi (without a ground plane) 3.5 dBi (with a 60 cm ground plane)	< 2.0:1*	10 watts	50 ohms	Vertical, linear	360°	without a ground plane: 70° with a 60 cm ground plane: 50°

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Ingress Protection	Temperature Range
2.36 x 1.73 in (6.0 x 4.4 cm)	0.11 lbs (50 g)	White GE Lexan® EXL9330	IP67**	-40°C to +85°C

* Tested with a 1.5-meter PFP-195 cable. ** When installed according to the manufacturer's installation instructions.



Low-Profile Access Point Antenna for Broadband Wireless

The PCTMI2458-RPC is a low-profile antenna that is optimized for operation with reverse polarity TNC compatible broadband wireless MIMO (802.11ac) access points operating at 2.4 GHz and 5 GHz frequencies. The rugged, UV-resistant housing makes it suitable for use in a wide variety of IIoT applications, including office LAN environments, factory floors, and outdoor Wi-Fi networks.

Features

- Omnidirectional antenna for indoor or outdoor operation
- Outstanding performance in a very low-profile housing
- White UL94 V0 plastic housing
- Built directly on an RPTNC plug connector
- No more than 3.26 inches long including the connector



PCTMI2458-RPC

STANDARD CONFIGURATION

Model	Connector	Mount
PCTMI2458-RPC	Reverse Polarity TNC	Direct Access Point Mount

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	3 dB Azimuth Half Power Beamwidth	3 dB Elevation Half Power Beamwidth	Average Power	Nominal Impedance	Polarization
2.4-2.5 GHz 5.15-5.92 GHz	3 dBi 5 dBi	< 2.0:1	@ 2.4 GHz: 360° @ 5 GHz: 360°	@ 2.4 GHz: 62° @ 5 GHz: 35°	5 watts	50 ohms	Vertical, linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Housing Material	Temperature Range	Ingress Protection
3.26 L x 0.77 OD in (8.28 x 1.95 cm)	PC, White UL94 V0 Plastic	-30°C to +70°C	IPX7



Low-Profile Access Point Antennas for Broadband Wireless

PCTEL's very low-profile antennas are optimized for operation with Reverse Polarity TNC and SMA compatible broadband wireless MIMO (802.11n) access points operating at 2.4 GHz and/or 5 GHz frequencies. Their rugged, UV-resistant housing makes them suitable for use in a wide variety of indoor applications, including office LAN environments, factory floors, and retail establishments.

Features

- Omnidirectional antenna for indoor operation
- Outstanding performance in a very low-profile housing
- White UL94 V0 plastic housing
- Built directly on an RP-TNC or RP-SMA plug connector
- No more than 1-1/2" long including the connector



PCTMI2458-RPSMA

STANDARD CONFIGURATION

Model	Connector	Mount
PCTMI2458-RPSMA	Reverse Polarity SMA Male Inside Thread/Center Receptacle	Direct Access Point Mount (all models)

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Average Power	Nominal Impedance	Polarization
PCTMI2458-RPSMA	2.400-2.500 GHz, 5.150-5.925 GHz	2.2 dBi, 4.0 dBi	< 2.0:1	360°	45°, 35°	10 watts	50 ohms	Vertical, linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Housing Material	Temperature Range
1.7 L x 0.75 OD in (4.3 L x 1.9 cm)	PC	0°C to +55°C

MPAMB Series Portable Omnidirectional Antennas



PCTEL's MPAMB portable antennas are designed for indoor wireless applications requiring multiple band coverage. Each rugged antenna features a compact "blade" style design and 0-90° articulating knuckle. Select no knuckle models also available.

Features

- Multi-band performance
- Ground plane independent design provides added installation flexibility
- Rugged polycarbonate housing provides added durability for use in demanding wireless environments
- Articulating knuckle provides 0°-90° pivot and 180° swivel movement allowing vertical orientation of the antenna, regardless of the orientation or position of the wireless device (unless otherwise specified)



MPAMB Series

STANDARD CONFIGURATION

Model	Connector	Mount
MPAMB24495804	Reverse Polarity TNC Male	Direct Access Point Mount (all models)
MPAMB24495804-RPSMA	Reverse Polarity SMA Male	
MPAMB700MSMA	SMA Male	
MPAMB700MTNC	TNC Male	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Average Power	Nominal Impedance	Polarization
MPAMB24495804	2.4-2.5 GHz / 4.94 - 5.85 GHz	2.14 dBi/4 dBi	< 2.5:1	10 watts	50 Ohms	Vertical, linear
MPAMB24495804-RPSMA	2.4-2.5 GHz / 4.94 - 5.85 GHz	2.14 dBi/4 dBi	< 2.5:1	10 watts	50 Ohms	Vertical, linear
MPAMB700MSMA	698-960 MHz / 1.71-2.70 GHz	2 dBi (average)	< 2.5:1	10 watts	50 Ohms	Vertical, linear
MPAMB700MTNC	698-960 MHz / 1.71-2.70 GHz	2 dBi (average)	< 2.5:1	10 watts	50 Ohms	Vertical, linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Model	Dimensions	Housing Material	Temperature Range
MPAMB24495804	height: 6 in (15.2 cm)	ABS (UV-stabilized)	-40°C to +75°C
MPAMB24495804-RPSMA	height: 6 in (15.2 cm)	ABS (UV-stabilized)	-40°C to +75°C
MPAMB700MSMA	height: 8.3 in (21.1 cm)	ABS (UV-stabilized)	-40°C to +75°C
MPAMB700MTNC	height: 8.3 in (21.1 cm)	ABS (UV-stabilized)	-40°C to +75°C