PCTEL®

INFRASTRUCTURE ANTENNAS

LTE Cellular Broadband Omnidirectional Antenna with Optional Integrated GPS Unit

The BOA-LCM multi-band antenna series utilizes PCTEL's broadband element technology to achieve superior bandwidth performance. This platform offers multi-band coverage, optional high rejection GPS LNA technology, an easy to install design with ruggedized materials to provide maximum durability and performance for mobile data and video communications.

BOA-LCMGPS-PTNM

Features

- Multi-band coverage: 700 MHz LTE, 800 MHz Cellular/SMR, 900 MHz GSM/ISM, 1700-2200 MHz GSM/PCS, 3G/4G LTE, AWS, 2.4 GHz Wi-Fi and 2.5-2.7 GHz WiMAX broadband wireless frequencies
- Dual MIMO design with full broadband coverage on both RF antenna ports
- High performance, low loss cable and connectors for maximum efficiency
- Collar mount for ease of installation on pipes up to 1.66 inches OD
- UV-resistant, rugged fiberglass housing

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
BOA-LCMGPS-PTNM	Three - 4 foot (1.2 m) RG-142B	N Male*	Collar mount (included) to fit schedule 40 (1.38-inch ID) or schedule 80 (1.278-inch ID) pipe sizes (pipe not included)
BOA-LCM-PTNF	Two - 4 foot (1.2 m) RG-142B	N Female*	Collar mount (included) to fit schedule 40 (1.38-inch ID) or schedule 80 (1.278-inch ID) pipe sizes (pipe not included)

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Average Power	Nominal Impedance	Polarization
BOA-LCMGPS-PTNM	690-2700 MHz	2 dBi	< 2.0:1	50 watts	50 ohms	Vertical, linear x 2
BOA-LCM-PTNF	690-2700 MHz	2 dBi	< 2.0:1	50 watts	50 ohms	Vertical, linear x 2

ELECTRICAL SPECIFICATIONS - GPS ANTENNA

Model	Frequency Range	Amplifier Gain*	Current Draw	DC Voltage	VSWR	Noise Figure
BOA-LCMGPS-PTNM	1575.42 MHz (GPS L1)	26 dB ± 3 dB	< 30 mA	3-5.5 V	1.5:1 typical output	1.8 dB typical

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Dimensions	Weight	Housing Material	Ingress Protection	Temperature Range
3.25 OD x 20 H in (8.26 x 50.8 cm)	4.2 lbs (1.91 kg)	Black, UV-stable fiberglass	IP54	-40°F to +185°F (-40°C to +85°C)

* Consult Customer Service for other connector options.

Ultra Flat Dual-Polarization LTE MIMO Ceiling Mount Outdoor/Indoor DAS Antenna

The PIM160-OCM is a dual-polarization LTE MIMO antenna with ultra-low PIM (@ 2x43 dBm) for 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 outdoor or indoor DAS applications.

PIM160-OCM

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
- IP67 ingress protection for ceiling mount installations outdoor or indoors
- 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

STANDARD CONFIGURATION

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

ELECTRICAL SPECIFICATIONS (ALL MODELS)

Frequency Range	Average Peak Gain	VSWR (Average)	Port-to-Port Isolation
698-746 MHz /	3.4 dBi	1.8:1	≤ -17 dB
746-896 MHz /	3.4 dBi	1.5:1	≤ -17 dB
896-960 MHz /	3.4 dBi	1.6:1	≤ -17 dB
1695-2200 MHz /	5.9 dBi	1.5:1	≤ -25 dB
2200-2700 MHz	5.9 dBi	1.6:1	≤ -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 (ALL MODELS)

Dimensions	Weight	Temperature Range	Material Substance
8.58 OD x 1.85 H in (21.8 x 4.7 cm)	1.4 lbs (0.65 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 the model.

MPMI2458-4-RPC

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

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)	

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°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued (ALL MODELS)

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

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

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.

M2M Indoor/Outdoor Wi-Fi MIMO Antenna

PCTEL's DIV2458PTRAMMCX is a dual-band two port Wi-Fi MIMO omnidirectional antenna, ideal for fixed mount applications. The product was designed for optimal pattern and port-to-port isolation performance to maximize data throughput in MIMO or diversity applications.

DIV2458PTRAMMCX

Features

- Dual-band broadband performance
- MIMO/Diversity Wi-Fi design
- Single cable exit for easier installation
- Ideal for outdoor or indoor fixed installations requiring a low-profile, diversity MIMO antenna solution
- Ground plane independent design

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
DIV2458PTRAMMCX	7 in RG-316	Right angle MMCX plug	5/8-inch diameter through-hole mounting stud

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
2.4-2.5 GHz / 4.9-5.9 GHz	2 dBi / 4 dBi	1.4 (typical) / 1.8 (maximum)	360° / 360°	@ 2.4 GHz: 50° @ 5 GHz: 35°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Average Power	Nominal Impedance	Polarization
20 watts	50 ohms	Vertical, linear x 2

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Ingress Protection	Temperature Range
4 H x 5.52 L x 1.74 W in (10.16 x 14.02 x 4.42 cm)	0.5 lbs (0.2 kg)	ASA	IP67*	-40°C to +85°C

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

VenU® 4G LTE/Cellular & Wi-Fi Omnidirectional Antenna

The VenU BMHO69027002 is a high performance omnidirectional antenna designed for outdoor base station applications. It supports high capacity data throughput for 4G LTE Cellular, 3G and Wi-Fi wireless networks in a compact housing. The antenna can be direct mounted via a built-in N Female bulkhead termination that allows direct mounting to the radio equipment.

Features

- Rugged, UV-resistant, low-profile housing for outdoor applications
- Innovative vented design with aerated cap and base drain system
- N Female bulkhead for direct radio mount access

BMHO69027002NF

BAM1009 mount

STANDARD CONFIGURATION

Model	Connector	Mount
BMHO69027002NF	N Female bulkhead	BAM-1009 base station aluminum mount kit for masts up to 2.4 inches in diameter (sold separately)

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
690-960 MHz / 1700-2700 MHz	2 dBi / 2 dBi	360° / 360°	45° / 35°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Average Power	Polarization	Nominal Impedance
25 watts max.	Vertical, linear	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material
9 H x .94 OD in (22.86 x 2.38 cm)	0.30 lbs (0.14 kg)	Black UV-Stable ASA

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS, continued

Rated Wind	Temperature Range	Lateral Thrust @ Rated Wind	Bending Moment @ Rated Wind
125 mph	-40°C to +85°C	3.1 lbs	1.1 ft-lbs

RoHS Compliance: 2002/95/EC and 2003/11/EC

Compact Omnidirectional Antenna

The BMHO9002IP omnidirectional antenna is a high performance low-profile fixed mount antenna in a rugged housing. The antenna is designed to cover frequencies for industrial wireless data applications. With its integral N Male connector at the base, this antenna can be directly mounted on the radio equipment or other enclosures with the mating bulkhead connector.

Features

- Slender, rugged housing
- IP67 rated design when installed
- Black UV-resistant radome to protect the antenna
- Type N Male connector

BMHO9002IP

STANDARD CONFIGURATION

Connector	Mount
N Male	Direct mount

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain*	VSWR*	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
863-928 MHz	2 dBi (nominal)	< 1.5	360°	60°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Average Power	Nominal Impedance	Polarization
25 watts	50 ohms	Vertical, Linear

MECHANICAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Ingress Protection
3.05" H (77.5 mm)	3 oz (85 g)	ASA, UV-Stable Plastic	IP67

* When installed on a 6" square ground plane

Compact, Ground Plane Independent Dual-Band Wi-Fi Omnidirectional Antenna

The BMHODB2458IP omnidirectional antenna is a high performance low-profile fixed mount antenna in a rugged housing. The antenna is designed to cover frequencies for Wi-Fi and industrial wireless data applications. With its integral N Male connector at the base, this antenna can be directly mounted on the radio equipment or other enclosures with the mating bulkhead connector.

Features

- Slender, rugged housing
- IP67 rated design when installed
- Black UV-resistant radome to protect the antenna
- Type N Male connector

BMHODB2458IP

STANDARD CONFIGURATION

Model	Connector	Color	Mount
BMHODB2458IP	N Male	Black	Direct mount
MHODB2458IP	N Male	White	Direct mount

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
2.4-2.5 GHz / 4.9-5.9 GHz	2 dBi (nominal) / 2 dBi (nominal)	< 2.0 / < 2.0	360° / 360°	60° / 60°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

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

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Ingress Protection	Temperature Range
0.96 OD x 3.05 H in (2.45 x 7.75 cm)	3 oz (85 g)	UV-stable ASA	IP67	-40°C to +85°C

PCTEL Dual-Band High Performance Omnidirectional Antenna

The MHODB24490507-IP high performance omnidirectional antenna is designed to cover frequencies from 2.4-2.5 GHz and 4.94-5.925 GHz for broadband access applications. With its integral N Female and N Male connector options at the base, this antenna can be directly mounted on the radio equipment.

Features

- Slender, rugged housing (1.25" OD)
- Innovative sealed version for harsh environments
- White UV-resistant radome; protects the antenna elements from environmental factors

MHODB24490507NF-IP

BAM1009 mount

STANDARD CONFIGURATION

Model	Connector	Mount
MHODB24490507NF-IP MHODB24490507NM-IP	N Female bulkhead N Male	BAM-1009 base station aluminum mount kit for masts up to 2.4 inches in diameter (sold separately)

ELECTRICAL SPECIFICATIONS - RF ANTENNA (ALL MODELS)

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Average Power	Nominal Impedance	Polarization
2.4-2.5 GHz / 4.94-5.925 GHz	5 dBi / 7 dBi	< 2.0	360°	25° / 15°	25 watts	50 ohms	Vertical, linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Dimensions	Weight	Housing Material	Rated Wind	Temperature Range	Ingress Protection
1.25 OD x 11 H in (3.17 x 27.9 cm)	0.3 lbs (.14 kg)	White UV-Stable ASA	125 mph	-40°C to +85°C	IP67

PCTEL Dual-Band High Performance Omnidirectional Antennas

PCTEL's MHODB high performance omnidirectional antenna series is designed to cover frequencies from 2.4-2.5 GHz and 4.94-5.925 GHz for broadband access applications. With its integral N Male connector at the base, this antenna can be directly mounted on the radio equipment. N Female bulkhead models are also available.

Features

- Slender, rugged housing (1.25" OD)
- Innovative vented design for upright or inverted mounting
- White UV-resistant radome protects the antenna elements from environmental factors
- Black UV-resistant radome available on select models

BAM1009 mount

BMHODB24490305NM

MHODB24490507NM

STANDARD CONFIGURATION

Model	Connector	Mount
BMHODB24490305NM	Type N Male	BAM-1009 base station aluminum mount kit for masts up to 2.4 inches in diameter (sold separately)
MHODB24490507NM	Type N Male	
MHODB24490305NM	Type N Male	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Average Power	Nominal Impedance	Polarization
BMHODB24490305NM	2.4-2.5 GHz / 4.94-5.925 GHz	3 dBi / 5 dBi	< 2.0	360° (omni)	35° / 25°	25 watts	50 ohms	Vertical, linear
MHODB24490507NM	2.4-2.5 GHz / 4.94-5.925 GHz	5 dBi / 7 dBi	< 2.0	360° (omni)	25° / 15°	25 watts	50 ohms	Vertical, linear
MHODB24490305NM	2.4-2.5 GHz / 4.94-5.925 GHz	3 dBi / 5 dBi	< 2.0	360° (omni)	35° / 25°	25 watts	50 ohms	Vertical, linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Model	Dimensions	Weight	Housing Material	Rated Wind	Temperature Range
BMHODB24490305NM	1.25 OD x 6.3 H in (3.17 x 16 cm)	0.3 lbs (.14 kg)	White or Black UV-Stable ASA	125 mph	-40°C to +85°C
MHODB24490507NM	1.25 OD x 10.4 H in (3.17 x 26.4 cm)	0.3 lbs (.14 kg)	White or Black UV-Stable ASA	125 mph	-40°C to +85°C
MHODB24490305NM	1.25 OD x 6.3 H in (3.17 x 16 cm)	0.3 lbs (.14 kg)	White or Black UV-Stable ASA	125 mph	-40°C to +85°C

PCTEL Heavy-Duty Omnidirectional Base Station Platform

The PCTEL BOA omnidirectional base station antennas consist of a linear array, encapsulated in a heavy-duty fiberglass radome with a thick-walled 6061-T6 aluminum mounting base. The rugged and robust design makes these antennas ideal for deployment in harsh environments where long term reliability and durability cannot be compromised. This platform is ideal for industrial wireless applications in the SCADA, Utility Smart Grid, Positive Train Control, Remote Monitoring, Precision Agriculture, and Military/Defense markets.

BOA9025 and BAM1017 mount

BOA9025 and BAM1005 mount

BOA2175 and MMK5 mount

Features

- UV-stable gray fiberglass radome
- Versatile mounting brackets included
- Black, hard coat anodized finish on antenna base and mounting brackets
- Galvanized mounting hardware
- Movable drain plug for upright or inverted mounting
- DC grounded for ESD protection
- Stable pattern and gain performance with no field tuning required
- Temperature rang -40°C to +85°C
- Optional BAM1017 mount compatible with wooden, concrete, or composite utility poles

STANDARD CONFIGURATION

Model	Connector	Mount
BOA9025	N Female bulkhead	BAM1005 mast mount included
BOA9028	N Female bulkhead	BAM1005 mast mount included
BOA90211	N Female bulkhead	MMK5 mast mount included
BOA4409	N Female bulkhead	MMK5 mast mount included
BOA4357	N Female bulkhead	BAM1005 mast mount included

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Elevation Half Power Beamwidth	Average Power	Nominal Impedance
BOA9025	902-928 MHz	5.1 dBi / 3 dBd	< 1.5	25°	250 watts	50 ohms
BOA9028	902-928 MHz	8.1 dBi / 6 dBd	< 1.5	13°	250 watts	50 ohms
BOA90211	902-928 MHz	11.1 dBi / 9 dBd	< 1.5	6°	250 watts	50 ohms
BOA4409	440-460 MHz	9.1 dBi / 7 dBd	<1.7	11°	250 watts	50 ohms
BOA4357	430-470MHz	7.1 dBi / 5 dBd	<1.7	18°	250 watts	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions	Weight	Housing Material	Rated Wind
BOA9025	2 OD x 55 in (5 x 139.7 cm)	5.0 lbs	Fiberglass	125 mph
BOA9028	2 OD x 68 in (5 x 172.7 cm)	6.0 lbs	Fiberglass	125 mph
BOA90211	2 OD x 122 in (5 x 309.9 cm	10.0 lbs	Fiberglass	125 mph
BOA4409	2 OD x 151 in (5 x 383.5 cm)	12 lbs	Fiberglass	125 mph
BOA4357	2 OD x 83 in (5 x 210.8 cm)	7.0 lbs	Fiberglass	125 mph

PCTEL Heavy-Duty Omnidirectional Base Station Platform

The BOA omnidirectional base station antenna design utilizes a linear array, encapsulated in a heavy-duty fiberglass radome with a thick-walled mounting base for reliable, long term use. This rugged design withstands harsh environments, making the antennas ideal for Industrial Wireless and Military applications. The antennas in this series are DC grounded for ESD protection of radio components.

BOA24006NF

BOA24004NF

Features

- UV-stable, black fiberglass radome (0.625" diameter)
- Black chrome plated mounting base
- DC grounded design
- Fully sealed IP67 design
- Type N Male or Female connector options
- Wind rated 125 mph
- Temperature -40°C to +85°C

STANDARD CONFIGURATION

Model	Connector	Mount
BOA24004NF	N Female	BAM1009 or BAM1011-HCA mast mounts sold separately (all models)
BOA24006NF	N Female	
BOA24006NM	N Male	
BOA24008NF	N Female	
BOA24008NM	N Male	
BOA24008DT12NF	N Female	
BOA24008DT12NM	N Male	
BOA24008DT7NF	N Female	
BOA24008DT7NM	N Male	
BOA24010NF	N Female	
BOA51004NF	N Female	
BOA51004NM	N Male	
BOA58006NF	N Female	
BOA58010NF	N Female	
BOA58010NM	N Male	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Nominal Gain	VSWR	Elevation Half Power Beamwidth	Maximum Power	Nominal Impedance
BOA24004NF	2.4-2.5 GHz	4 dBi	< 1.5:1	42°	40 watts	50 ohms
BOA24006NF	2.4-2.5 GHz	6 dBi	< 1.5:1	28°	40 watts	50 ohms
BOA24006NM	2.4-2.5 GHz	6 dBi	< 1.5:1	28°	40 watts	50 ohms
BOA24008NF	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008NM	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008DT12NF	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008DT12NM	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008DT7NF	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24008DT7NM	2.4-2.5 GHz	8 dBi	< 1.5:1	15°	40 watts	50 ohms
BOA24010NF	2.4-2.5 GHz	10 dBi	< 1.5:1	9°	40 watts	50 ohms
BOA51004NF	5.1-5.9 GHZ	4 dBi	< 1.5:1	42°	20 watts	50 ohms
BOA51004NM	5.1-5.9 GHZ	4 dBi	< 1.5:1	42°	20 watts	50 ohms
BOA58006NF	5.7-5.8 GHZ	6 dBi	< 1.5:1	28°	20 watts	50 ohms
BOA58010NF	5.7-5.8 GHZ	10 dBi	< 1.5:1	10°	20 watts	50 ohms
BOA58010NM	5.7-5.8 GHZ	10 dBi	< 1.5:1	10°	20 watts	50 ohms

PCTEL Heavy-Duty Omnidirectional Base Station Platform

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions	Weight	Housing Material
BOA24004NF	.825 OD x 10.1 L in (2.09 x 25.65 cm)	0.33 lbs (151 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24006NF	.825 OD x 15.0 L in (2.09 x 38.1 cm)	0.38 lbs (176 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24006NM	.825 OD x 14.8 L in (2.09 x 37.5 cm)	0.30 lbs (134 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008NF	.825 OD x 19.4 L in (2.09 x 49.3 cm)	0.45 lbs (203 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008NM	.825 OD x 19.1 L in (2.09 x 48.5 cm)	0.35 lbs (161 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008DT12NF	.825 OD x 25.4 L in (2.09 x 64.5 cm)	0.52 lbs (235 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008DT12NM	.825 OD x 25 L in (2.09 x 63.5 cm)	0.40 lbs (182 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008DT7NF	.825 OD x 25.4 L in (2.09 x 64.5 cm)	0.52 lbs (235 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24008DT7NM	.825 OD x 25 L in (2.09 x 63.5 cm)	0.42 lbs (192 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA24010NF	.825 OD x 25.3 L in (2.09 x 64.4 cm)	0.52 lbs (235 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA51004NF	.825 OD x 5.5 L in (2.09 x 13.9 cm)	0.27 lbs (124 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA51004NM	.825 OD x 5.3 L in (2.09 x 13.5 cm)	0.18 lbs (82 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA58006NF	.825 OD x 7.29 in (2.09 x 18.5 cm)	0.30 lbs (134 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA58010NF	.825 OD x 17.9 L in (2.09 x 45.5 cm)	0.43 lbs (194 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)
BOA58010NM	.825 OD x 17.6 L in (2.09 x 19.3 cm)	0.33 lbs (152 gram)	Black UV-Stable Pultruded Fiberglass (0.625" diameter)

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS, continued

Model	Bending Moment at Rated Wind	Lateral Thrust at Rated Wind	Equivalent Flat Plate Area
BOA24004NF	0.97 lbf-ft	2.31 lbf	0.03 ft^2
BOA24006NF	2.13 lbf-ft	3.41 lbf	0.04 ft^2
BOA24006NM	2.07 lbf-ft	3.36 lbf	0.04 ft^2
BOA24008NF	4.24 lbf-ft	5.25 lbf	0.05 ft^2
BOA24008NM	4.14 lbf-ft	5.19 lbf	0.05 ft^2
BOA24008DT12NF	7.16 lbf-ft	6.81 lbf	0.07 ft^2
BOA24008DT12NM	7.04 lbf-ft	6.74 lbf	0.07 ft^2
BOA24008DT7NF	7.16 lbf-ft	6.81 lbf	0.07 ft^2
BOA24008DT7NM	7.04 lbf-ft	6.74 lbf	0.07 ft^2
BOA24010NF	7.16 lbf-ft	6.81 lbf	0.07 ft^2
BOA51004NF	0.30 lbf-ft	1.31 lbf	0.02 ft^2
BOA51004NM	0.27 lbf-ft	1.25 lbf	0.02 ft^2
BOA58006NF	0.51 lbf-ft	1.70 lbf	0.02 ft^2
BOA58010NF	3.57 lbf-ft	4.83 lbf	0.05 ft^2
BOA58010NM	3.48 lbf-ft	4.76 lbf	0.05 ft^2

PCTEL 800/900 MHz Fiberglass Base Station Omnidirectional Antennas

PCTEL's MFB 900/800 MHz series are base matched half wave antennas encapsulated in heavy-duty fiberglass radomes with a thick-walled aluminum mounting base for reliable long term use. All models are DC grounded and UPS shippable.


MFB9153

Features

- White UV-resistant pultruded fiberglass radome
- Thick-walled aluminum mounting base
- Unity, 3 dB, 5 dB, 7 dB models
- Temperature range -40°C to +85°C
- UPS shippable
- Factory tuned

STANDARD CONFIGURATION

Model	Connector	Mount
MFBW7463	N Female	Mast or wall mounted. Mount options for all models: (sold separately) MMK1: light duty mast mount for antennas under 30" MMK4: heavy-duty mast mount MMK9: aluminum mast mount for 1-5/16" OD antennas, BSWM: wall mounting bracket for antennas over 30" (two are required) MMK12: heavy-duty mount bracket
MFB8133	N Female	
MFB8583	N Female	
MFB8965(NF)*	N Male	
MFB8967(NF)*	N Male	
MFB9153	N Female	
MFB9155(NF)*	N Male	
MFB9157(NF)*	N Male	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	Elevation Half Power Beamwidth	Average Power	Nominal Impedance
MFBW7463	746-869 MHz	3 dB	40°	150 watts	50 ohms
MFB8133	806-866 MHz	3 dB	40°	150 watts	50 ohms
MFB8583	806-866 MHz	3 dB	40°	150 watts	50 ohms
MFB8965(NF)	896-940 MHz	5 dB	22°	150 watts	50 ohms
MFB8967(NF)	896-940 MHz	7 dB	17°	150 watts	50 ohms
MFB9153	902-928 MHz	3 dB	40°	150 watts	50 ohms
MFB9155(NF)	902-928 MHz	5 dB	22°	150 watts	50 ohms
MFB9157(NF)	902-928 MHz	7 dB	17°	150 watts	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Weight	Height	Bending Moment at Rated Wind (lbf)	Lateral Thrust at Rated Wind (lbf-ft)	Equivalent Flat Plate Area	Rated Wind
MFBW7463	1.50 lbs (0.68 kg)	27 in (68.5 cm)				125 mph
MFB8133	1.25 lbs (0.57 kg)	28 in (71.0 cm)	14.5	12.5	.12 sq ft	125 mph
MFB8583	1.25 lbs (0.57 kg)	28 in (71.0 cm)	14.5	12.5	.12 sq ft	125 mph
MFB8965(NF)	1.75 lbs (0.79 kg)	50.7 in (128.9 cm)	48.5	23.0	.23 sq ft	125 mph
MFB8967(NF)	4.00 lbs (1.81 kg)	94.7 in (240.6 cm)	164.8	41.8	.42 sq ft	125 mph
MFB9153	1.25 lbs (0.57 kg)	23 in (58.4 cm)	8.3	8.6	.12 sq ft	125 mph
MFB9155(NF)	1.75 lbs (0.79 kg)	50.7 in (128.9 cm)	48.5	23.0	.23 sq ft	125 mph
MFB9157(NF)	4.00 lbs (1.81 kg)	94.7 in. (240.67 cm)	164.794	41.742	.42 sq ft	125 mph

* (NF) indicates optional N Female connector.

PCTEL VHF & UHF Fiberglass Base Station Omnidirectional Antennas

The white fiberglass antenna series consists of base matched half wave antennas encapsulated in a heavy-duty fiberglass radomes with a thick-walled aluminum mounting base for reliable long term use. All models are DC grounded and UPS shippable.


MFB4505

Features

- Effective "J" pole design requires no radials or ground plane
- White UV-resistant pultruded fiberglass radome
- Thick-walled aluminum mounting base
- UPS shippable
- DC grounded
- Mast or wall mounted. Mount options for all models sold separately

STANDARD CONFIGURATION

Model	Connector	Mount
MFB1500 MFB1503 MFB1560 MFB1563 MFB4500 MFB4503 MFB4505 MFB4600 MFB4603 MFB4605	N Male with 16" jumper (all models)	MMK4: heavy-duty mast mounting MMK9: Aluminum mast mount for 1-5/16" OD antennas (two required with the 10" sleeve antenna models) MMK12: heavy-duty mount bracket MBSWM: wall mounting bracket (2 required) MMK4: heavy-duty mast mounting

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Factory Tuned Frequency	Gain	VSWR	Elevation Half Power Beamwidth	Bandwith @ 1.5:1 VSWR	Average Power	Nominal Impedance
MFB1500	150-156 MHz	153 MHz	Unity	< 1.5:1	80°	3.0 MHz	250 watts	50 ohms
MFB1503	150-156 MHz	150 MHz	3 dB*	< 1.5:1	29°	3.5 MHz	250 watts	50 ohms
MFB1560	156-162 MHz	159 MHz	Unity	< 1.5:1	80°	3.0 MHz	250 watts	50 ohms
MFB1563	156-162 MHz	156 MHz	3 dB*	< 1.5:1	29°	3.5 MHz	250 watts	50 ohms
MFB4500	450-460 MHz	455 MHz	Unity	< 1.5:1	90°	10 MHz	250 watts	50 ohms
MFB4503	450-460 MHz	455 MHz	3 dB	< 1.5:1	38°	10 MHz	250 watts	50 ohms
MFB4505	450-460 MHz	455 MHz	5 dB	< 1.5:1	27°	10 MHz	250 watts	50 ohms
MFB4600	460-470 MHz	465 MHz	Unity	< 1.5:1	90°	10 MHz	250 watts	50 ohms
MFB4603	460-470 MHz	465 MHz	3 dB*	< 1.5:1	38°	10 MHz	250 watts	50 ohms
MFB4605	460-470 MHz	465 MHz	5 dB	< 1.5:1	27°	10 MHz	250 watts	50 ohms

MECHANICAL SPECIFICATIONS

Model	Dimensions	Weight	Bending Moment at 100 mph Rated Wind	Lateral Thrust at 100 mph Rated Wind	Equivalent Flat Plate Area
MFB1500	1-5/16" OD X 71"	3 lbs	59.8 ft-lbs	20.21 lbs	.30 sq ft
MFB1503	1-5/16" OD X 117"	4 lbs	107 ft-lbs	26.9 lbs	.44 sq ft
MFB1560	1-5/16" OD X 71"	3 lbs	59.8 ft-lbs	20.21 lbs	.30 sq ft
MFB1563	1-5/16" OD X 117"	4 lbs	107 ft-lbs	26.9 lbs	.44 sq ft
MFB4500	1-5/16" OD X 30"	1.0 lbs	9.35 ft-lb	7.48 lbs	.11 sq ft
MFB4503	1-5/16" OD X 51"	4.0 lbs	38.9 ft-lb	16.4 lbs	.30 sq ft
MFB4505	1-5/16" OD X 77"	4.5 lbs	69.7 ft-lb	21.8 lbs	.34 sq ft
MFB4600	1-5/16" OD X 30"	1.0 lbs	9.35 ft-lb	7.48 lbs	.11 sq ft
MFB4603	1-5/16" OD X 51"	4.0 lbs	38.9 ft-lb	16.4 lbs	.30 sq ft
MFB4605	1-5/16" OD X 77"	4.5 lbs	69.7 ft-lb	21.8 lbs	.34 sq ft

*3 dB gain antennas are factory tuned to the lowest side of the frequency range. Field tuning to the desired frequency is required.

5 GHz Dual-Polarized Directional Array Antenna

This 5 GHz dual port, dual-polarized directional array antenna provides high gain and managed sidelobes pattern shaping that supports a variety of broadband wireless access applications, including point-to-point wireless backhaul and point-to-multi point trackside Wi-Fi. The platform's discrete directional antenna technology combines two traditional antennas into a single package without sacrificing performance. Unlike traditional panel antennas, this endfire array antenna is physically and visually less obtrusive, making it ideal for installations with limited space availability.

DAA4959-14DP

Features

- 802.11n MIMO performance for optimized data speed and throughput
- Dual port, dual-polarization package replaces two traditional directional panels
- Gain and pattern optimized for point-to-point and point-to-multi point connectivity
- Small footprint design can accommodate tunnel or trackside installations with as little as 9 cm clearance
- Includes a robust wall/mast mount bracket designed to withstand maximum 56 m/s wind speed
- High front-to-back ratio allows for back-to-back mounting of antennas; ideal for trackside or roadside coverage

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
DAA4959-14DP	Mating cable assemblies sold separately	2 x N Female Bulkhead	Wall mount clamp bracket included

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
4.9-5.9 GHz	14.6 dB	< 2.0:1, typical < 2.5:1, across band	23-35°	23-35°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Front to Back Ratio	Side Lobes	Nominal Impedance	Polarization	Port-to-Port Isolation
> 35 dB	12-15 dB below peak	50 ohms	Dual port, dual orthogonal	19 dB minimum

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Ingress Protection	Temperature Range	Rated Wind
Antenna: 1.1 OD x 11.2 L in (2.85 x 28.5 cm) Mounting Bracket: 3.7 OD x 5.3 L x 1.57 W in (9.6 x 13.5 x 11.5 cm)	IP67	-40°C to +70°C	125 mph

VenU® Dual-Polarization 4G LTE MIMO Directional Panel

This VenU antenna offers 4G LTE multi-band coverage, high gain, and a rugged housing design, with a heavy-duty mounting bracket for mast or wall mount installations. It is ideal for Small Cells, indoor/outdoor DAS systems, and Oil and Gas/ Utility sites requiring a rugged and reliable 4G LTE/Cellular antenna solution.

Features

- MIMO broadband directional coverage with DAS, ODAS, Small Cell, and industrial wireless applications
- 4.1-9.5 Mini DIN, 4.3-10 or N Female connector options for carrier network compliance
- IP67* waterproof vented design
- Indoor and outdoor rated
- Dual slant polarized at 1710-2700 MHz
- Can be mounted for vertical or horizontal polarization at 698-960 MHz
- Includes heavy-duty articulating mount

VenU PIM160-OPM

STANDARD CONFIGURATION

Model	Connector	Mount	Radome
PIM160-OPM-NF PIM160-OPM-4.3	2 x Type N Female 2 x 4.3-10 (Female)	Heavy-duty articulating mount suitable for pipe or wall installation is included	White, UL 94 VHB Polycarbonate

ELECTRICAL SPECIFICATIONS - RF ANTENNA (ALL MODELS)

Frequency Range	Gain	PIM Rating	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
698-960 MHz / 1710-2700 MHz	6 dBi / 8 dBi	2 x 20 W (Typical) ≤ -160 dBc each port	≤ 1.5:1 / ≤ 1.5:1	65° / 65°	70° / 60°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued (ALL MODELS)

Front to Back Ratio	Maximum Power	Nominal Impedance	Polarization	Port-to-Port Isolation
≥20 / ≥20	50 watts	50 ohms	Vertical/Horizontal @ 698-960 MHz +- 45° at 1710-2700 MHz	≤ -25 / ≤ -25

MECHANICAL SPECIFICATIONS & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Rated Wind	Ingress Protection	Temperature Range
12 L x 12 W x 4.4 H in (30.48 x 30.48 x 11.18 cm)	4.3 lbs (1.95Kg)	125 mph	IP67*	-40°C to +80°C (Storage) -40°C to +70°C (Operating)

* When installed according to manufacturer's installation instructions.

VenU® Dual-Polarization 4G LTE MIMO Directional Panel

This VenU antenna offers 4G LTE multi-band coverage, high gain, and a rugged housing design, with a heavy-duty mounting bracket for mast or wall mount installations. It is ideal for Small Cells, indoor/outdoor DAS systems, and Oil and Gas/ Utility sites requiring a rugged and reliable 4G LTE/Cellular antenna solution.

PLTE7027M

Features

- MIMO broadband directional coverage with DAS, ODAS, Small Cell, and industrial wireless applications
- N Female bulkhead connectors
- IP67* waterproof vented design
- Indoor and outdoor rated
- Dual slant polarized or V/H polarization mounting options
- Includes heavy-duty articulating mount

STANDARD CONFIGURATION

Model	Connector	Mount	Radome
PLTE7027M	2 x Type N Female	Heavy-duty articulating mount suitable for pipe or wall installation is included	White, UL 94 VHB Polycarbonate

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
698-960 MHz / 1710-2700 MHz	8.2 dBi / 8 dBi	< 2.0:1	~80° / ~75°	~55° / ~65°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Front to Back Ratio	Maximum Power	Nominal Impedance	Polarization	Port-to-Port Isolation
~20 dB	50 watts	50 ohms	Dual slant (±45°) or horizontal & vertical (mount dependant)	< - 22 dB

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Rated Wind	Ingress Protection	Temperature Range
12 L x 12 W x 4.4 H in (30.48 x 30.48 x 11.18 cm)	2.0 lbs (0.907 kg)	125 mph	IP67*	-40°C to +85°C

* When installed according to manufacturer's installation instructions.

VenU® PIM-Rated Single Polarization Directional Panel

This VenU antenna offers 4G LTE multi-band coverage in a rugged housing design, with a heavy-duty mounting bracket for mast or wall mount installations. It is ideal for Small Cells, indoor/outdoor DAS systems, and Oil and Gas/ Utility sites requiring a rugged and reliable 4G LTE/Cellular antenna solution.

Features

- Broadband directional coverage for DAS, ODAS, Small Cell, and industrial wireless applications
- PIM rated: -153 dBc @ 2x43 dBm (20 W) carriers
- N Female bulkhead connector
- IP67 vented design
- Indoor and outdoor rated
- Linear, vertical or horizontal polarization
- Includes heavy-duty articulating mount

PLTE7027S-I

STANDARD CONFIGURATION

Model	Connector	Mount
PLTE7027S-I	N Female	Heavy-duty articulating mount suitable for pipe or wall installation is included

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
698-960 MHz / 1710-2170 MHz / 2170-2700 MHz	6.5 dBi / 8.0 dBi / 6.8 dBi	< 2.0:1	~ 80° / ~ 50° / ~ 70°	~ 95° / ~ 75° / ~ 90°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Maximum Average Power	Nominal Impedance	Polarization	PIM
50 watts	50 ohms	Linear, horizontal or vertical	-153 dBc @ 2x43 dBm (20 W) carriers

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Rated Wind	Temperature Range	Ingress Protection	Radome
9.8 L x 7.2 W x 2.0 H in (24.9 x 18.2 x 5.1 cm)	1.58 lbs (0.718 kg)	125 mph	-40°C to +85°C	IP67	Off-White, UL 94 VHB ASA

VenU® Dual-Band, 802.11ac 8-Port Sector Antenna

The dual-band 8-port sector 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 802.11ac multi-band wireless LAN access point radios. It provides optimal coverage for venues with a large number of mobile data users.

FPMI2458-VP8

Features

- Dual-band coverage of 2.4 GHz and 5 GHz broadband wireless frequencies
- Four 2.4 GHz and four 5 GHz integrated elements terminated with high performance, low loss plenum cable
- Low-profile radome
- Includes heavy articulating mount for wall or mast mount installations
- Adjustable articulating mounting bracket included
- Antenna may be mounted flat to a wall and painted to match its background*

STANDARD CONFIGURATION

Model	Cable	Connector	Mounting Method:
FPMI2458-VP8-NF	Eight 60-inch ± 2 PFP240UF (cable assemblies with N Male terminations included)	Eight N Female connectors	Adjustable mounting bracket for wall or pipe mount included.

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Typical Gain	Peak Gain	Vertical Beamwidth	Horizontal Beamwidth	Maximum Power	Nominal Impedance	Polarization	VSWR	Front-to-Back Ratio
2.4-2.5 GHz / 5.15-5.875 GHz	5.7 dBi / 4 dBi	7 dBi / 6 dBi	90° / 60°	100° / 75°	25 watts	50 ohms	Vertical	< 2.0:1	> 15 dBi

MECHANICAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Rated Wind	Temperature Range
7.15 L x 15.71 W x 2.0 D in (18.1 x 39.9 x 5.1 cm)	2.9 lbs (1.3 kg)	White, UL 94 HB plastic	125 mph	-40°F to +158°F (-40°C to +70°C)

* Non-metallic paint only

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 / 5.15-5.85 GHz	8.5 dBi / 6 dBi	@ 2.4 GHz: 1.5 typical, 2.0 maximum @ 5 GHz: 1.8 typical, 2.5 maximum	60° / 55°	30° / 35°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

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

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Housing Material	Ingress Protection	Rated Wind	Temperature Range
9.8 L x 7.2 H x 2.0 D in (24.9 x 18.3 x 5 cm)	ASA, UL 94 HB plastic, off-white	IP67*	125 mph	-40°C to +70°C

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

VenU® Dual-Band, Dual-Polarization, 802.11 ac 8-Port Sector Antennas

These dual-band, 8-port sector antennas can be used for 802.11ac MIMO applications. The antennas cover both 2.4-2.5 GHz and 5.1-5.9 GHz in one radome. The radome is constructed from lightweight, durable, UV-stable plastic. The eight elements can also be used individually or in combination with legacy 802.11 access points.

Features

- UL listed radome and PC board materials conform to UL's high burn flame retardant rating, for added installation flexibility
- Attractive, low-profile housing blends well with indoor and outdoor environments where aesthetic considerations are important
- Articulating mount included

STANDARD CONFIGURATION

Model	Cable	Connector	Mounting Method:
FPMI2458-DP806NM	Eight 58-inch +/-2 RG-58PLW Plenum	N Male	Adjustable mounting bracket for wall or pipe mount included.
FPMI2458-DP812NM	Eight 58-inch +/-2 RG-58PLW Plenum	N Male	Adjustable mounting bracket for wall or pipe mount included.
FPMI2458-DP810NM	Eight 58-inch +/-2 RG-58PLW Plenum	N Male	Adjustable mounting bracket for wall or pipe mount included.

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Typical Gain	Peak Gain	Vertical Beamwidth	Horizontal Beamwidth	Maximum Power	Nominal Impedance
FPMI2458-DP806NM	2.4-2.5 GHz / 5.1-5.9 GHz	6.5 dBi / 5.5 dBi	7.5 dBi / 6.5 dBi	43° / 37°	31° / 29°	25 watts	50 ohms
FPMI2458-DP812NM	2.4-2.5 GHz / 5.1-5.9 GHz	12 dBi / 11 dBi	13 dBi / 12 dBi	43° / 37°	31° / 29°	25 watts	50 ohms
FPMI2458-DP810NM	2.4-2.5 GHz / 5.1-5.9 GHz	10 dBi / 6 dBi	10.5 dBi / 7.5 dBi	44° / 43°	51° / 53°	25 watts	50 ohms

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Model	Polarization	VSWR	Front-to-Back Ratio	Front-to-Side Ratio
FPMI2458-DP806NM	Dual linear	< 2.25:1	> 22 dB @ 2.4 GHz / > 25 dB @ 5 GHz	17 dB @ 2.4 GHz / 15 dB @ 5 GHz
FPMI2458-DP812NM	Dual linear	< 2.25:1	> 22 dB @ 2.4 GHz / > 25 dB @ 5 GHz	17 dB @ 2.4 GHz / 15 dB @ 5 GHz
FPMI2458-DP810NM	Dual linear	< 2.25:1	> 21 dB @ 2.4 GHz / > 23 dB @ 5 GHz	15 dB @ 2.4 GHz / 14 dB @ 5 GHz

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Ingress Protection	Rated Wind	Temperature Range
12 L x 12 H x 4.3 D in (30.5 x 30.5 x 11 cm)	5 lbs (2.27 kg)	White, UL 94 HB plastic	IP67	125 mph	-22°F to +176°F (-30°C to +80°C)

VenU® Dual-Band, 802.11 ac 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 UV-protected radome is constructed from lightweight, durable plastic. 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.

FPMI2458-DP4RPSMA

FPM-1005 mount

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

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. (all models)
FPMI2458-TP3RPSMA	Three 32-inch UL94 RG-316	RPSMA Plug	
FPMI2458-DP2RPSMA	Two 32-inch UL94 RG-316	RPSMA Plug	
FPMI245865-TP3NM	Three 32-inch UL94 RG-316	N Male	

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	85° / 60°	80° / 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	85° / 60°	80° / 65°
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 & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Dimensions	Weight	Housing Material	Ingress Protection	Rated Wind	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*	125 mph	-40°F to +158°F (-40°C to +70°C)

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

VenU® Directional MIMO Panel Antennas

The VenU dual-band MIMO antenna provides spatial and polarization diversity coverage of 2.4-2.5 GHz and 5.1-5.9 GHz broadband wireless Wi-Fi frequencies in an attractive, low-profile housing. The platform was designed to provide optimal coverage for areas or events with a large number of mobile data users. It was designed for outdoor or in-building installations utilizing 802.11n multi-band wireless LAN access point radios.

Features

- Coverage of 2.4-2.5 GHz and 5.1-5.9 GHz frequencies
- Six-port MIMO design (three ports for each frequency band)
- Beamwidth and gain characteristics designed for optimal coverage
- Integral high performance, low loss Plenum rated cable jumpers
- Fully adjustable mount for pipe or wall mounting
- UL 94 HB listed materials

FP2458-DP3X3-RPC

FPM-1001 Mount

STANDARD CONFIGURATION

Model	Connector	Mount
FP2458-DP3X3-RPC	Reverse Polarity TNC plug	FPM-1001 is included. Suitable for pipe or wall installation.
FP2458-DP3X3-RPSMA	Reverse Polarity SMA plug	
FP2458-DP3X3-NM	N Male	
FP2458-DP3X3-RPNM	Reverse Polarity N Male	

ELECTRICAL SPECIFICATIONS - RF ANTENNA (ALL MODELS)

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
2.4-2.5 GHz / 5.1-5.9 GHz	12.5 dBi / 11.5 dBi	1.7:1 typical, 2.0:1 maximum	27° / 30°	48° / 40°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued (ALL MODELS)

Front to Back Ratio	Average Power	Nominal Impedance	Polarization	Port-to-Port Isolation
≥ 20	25 watts	50 ohms	Dual Linear (2 x V / 1 x H) for each band	32 dB / 37 dB

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Temperature Range	Rated Wind
14.5 L x 14.5 H x 1.57 D in (36.8 x 36.8 x 4 cm)	3.5 lbs (1.6 kg)	UL 94 HB ASA radome	-40°C to +85°C	125 mph

VenU® Dual-Polarization, 802.11 ac 4-Port Sector Antennas

The four port sector antennas can be used for 802.11ac MIMO applications operating in the 5.1-5.9 GHz frequency range. The UV-stable radome is constructed from lightweight, durable plastic. The four elements can also be used individually or in combination with legacy 802.11 access points.

Features

- UL listed radome and PC board materials conform to UL's high burn flame retardant rating, for added installation flexibility
- Attractive, low-profile housing blends well with indoor and outdoor environments where aesthetic considerations are important
- Adjustable articulating mounting bracket included

STANDARD CONFIGURATION

Model	Cable	Connector	Mounting Method:
FPMI58-DP404NM	Four 58-inch +/- 2 RG-58PLW, Plenum	N Male	Adjustable mounting bracket for wall or pipe mount included.
FPMI58-DP410NM	Four 58-inch +/- 2 RG-58PLW, Plenum	N Male	Adjustable mounting bracket for wall or pipe mount included.
FPMI58-DP403NM	Four 58-inch +/- 2 RG-58PLW, Plenum	N Male	Adjustable mounting bracket for wall or pipe mount included.
FPMI58-DP403RPSM	Four 58-inch +/- 2 RG-58PLW, Plenum	RPSMA Male	Adjustable mounting bracket for wall or pipe mount included.

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Typical Gain	Peak Gain	Vertical Beamwidth	Horizontal Beamwidth	Maximum Power	Nominal Impedance
FPMI58-DP404NM	5.1-5.9 GHz	3.5 dBi	4.5 dBi	40°	30°	25 watts	50 ohms
FPMI58-DP410NM	5.1-5.9 GHz	10.5 dBi	11.5 dBi	40°	30°	25 watts	50 ohms
FPMI58-DP403NM	5.1-5.9 GHz	2.5 dBi	5.8 dBi	40°	55°	25 watts	50 ohms
FPMI58-DP403RPSM	5.1-5.9 GHz	2.5 dBi	5.8 dBi	40°	55°	25 watts	50 ohms

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Model	Polarization	VSWR	Front-to-Back Ratio	Front-to-Side Ratio
FPMI58-DP404NM	Dual linear	< 2.0:1	> 20 dB	15 dB @ 5 GHz
FPMI58-DP410NM	Dual linear	< 2.0:1	> 20 dB	15 dB @ 5 GHz
FPMI58-DP403NM	Dual linear	< 2.0:1	> 20 dB	15 dB @ 5 GHz
FPMI58-DP403RPSM	Dual linear	< 2.0:1	> 25 dB	15 dB @ 5 GHz

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Rated Wind	Temperature Range
7.15 x 9.81 x 5.1 in (18.1 x 24.9 x 12.9 cm)	3 lbs (1.36 kg)	White, UL 94 HB plastic	125 mph	-22°F to +176°F (-30°C to +80°C)

Dual-Polarized Directional Panel Antenna

FP1400-13DP

FPM-1001 Mount

PCTEL's FP directional panel antenna series was designed to cover frequencies used in industrial wireless applications and to obtain maximum gain with an attractive, low-profile package. These models provide efficient and stable performance across the band and can be mounted indoors or outdoors.

Features

- ASA radome and PC board conform to the UL 94 HB flame retardant rating, allowing maximum installation flexibility
- Attractive, low-profile housing allows antenna to blend well in indoor or outdoor environments where aesthetic considerations are important
- Fully adjustable mounting bracket for pipe or wall mount installations
- Meets stringent building code requirements
- Panel mounted type N female connector

STANDARD CONFIGURATION

Model	Connector	Mount
FP1400-13DP	2 x Type N Female Panel Mount Connectors	FPM-1001 fully adjustable mount is included. Suitable for wall or mast mount installations (all models)
FP1800-15DP	2 x Type N Female Panel Mount Connectors	
FP2327-18DP	2 x Type N Female Panel Mount Connectors	
FP3637-18DP	2 x Type N Female Panel Mount Connectors	
FP4959-22DP	2 x Type N Female Panel Mount Connectors	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
FP1400-13DP	1.39-1.46 GHz	13 dBi ± 1 dB	1.5:1 typical, 2.0:1 maximum	35°	35°
FP1800-15DP	1.80-1.83 GHz	15 dBi ± 1 dB	1.5:1 typical, 2.0:1 maximum	22°	22°
FP2327-18DP	2.30-2.70 GHz	17.5 dBi ± 1 dB	1.5:1 typical, 2.0:1 maximum	20°	20°
FP3637-18DP	3.30-3.80 GHz	18.5 dBi ± 1 dB	1.7:1 typical, 2.0:1 maximum	17°	17°
FP4959-22DP	4.9-5.9 GHz	22.5 dBi +/- 1 dB	1.5:1 typical, 2.0:1 maximum	9°	9°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Model	Front to Back Ratio	Average Power	Nominal Impedance	Polarization
FP1400-13DP	> 23 dB	20 watts	50 ohms	Dual Linear, H/V or ±45° slant
FP1800-15DP	> 25 dB	20 watts	50 ohms	Dual Linear, H/V or ±45° slant
FP2327-18DP	> 27 dB	20 watts	50 ohms	Dual Linear, H/V or ±45° slant
FP3637-18DP	> 30 dB	20 watts	50 ohms	Dual Linear, H/V or ±45° slant
FP4959-22DP	> 29 dB	20 watts	50 ohms	Dual Linear, H/V or ±45° slant

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Housing Material	Rated Wind	Temperature Range
14.5 x 14.5 x 1.57 in (368 x 368 x 40 mm)	3.5 lbs (1.6 kg)	UL 94 HB ASA radome	125 mph	-40°C to +85°C

Directional Linear Polarized Panel Antennas

PCTEL's FP directional panel antenna series is designed to cover various frequencies, obtaining maximum gain with an attractive, low-profile package. All of the models provide efficient and stable performance across the band and can be mounted indoors or outdoors.

FP4959-22VP

FPM-1001 Mount

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
- Adjustable mounting brackets for outdoor installation
- Panel mounted type N Female connector

STANDARD CONFIGURATION

Model	Connector	Mount
FP8241850-10VP	Type N Female	FPM-1001 fully adjustable mount is included.
FP4959-22VP	Type N Female	Suitable for wall or mast mount installations (all models)

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
FP8241850-10VP	824-960 MHz / 1710-2170 MHz	10 dBi / 11 dBi	< 2.0:1	40° / 30°	52° / 66°
FP4959-22VP	4.9-5.9 GHz	22 dBi	< 1.5:1	9°	9°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Model	Front to Back Ratio	Maximum Power	Nominal Impedance	Polarization
FP8241850-10VP	≥ 25	20 watts	50 ohms	Vertical linear
FP4959-22VP	≥ 25	20 watts	50 ohms	Vertical linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS (ALL MODELS)

Dimensions	Weight	Radome Material	Rated Wind	Temperature Range
14.5 x 14.5 x 1.57 in (36.8 x 36.8 x 4 cm)	3.5 lbs (1.6 kg)	UL 94 HB ASA radome	125 mph	-40°C to +85°C

Enclosed Yagi MIMO Antennas for Wi-Fi Applications

PCTEL's 2.4 GHz and 5 GHz Enclosed Yagi MIMO Antennas are suited for long range broadband wireless access applications. They provide highspeed directional Wi-Fi coverage and optimized data throughput in a rugged, low-profile housing. They are ideal for point-to-point installations in challenging environmental settings such as subways, highways, smart grids, oil and gas fields, and wireless backhaul applications.

Features

- 802.11n MIMO performance for optimized data speed and throughput
- Ruggedized UV-stable housing with drain vents for long lasting, reliable performance in severe environmental conditions
- High gain for optimized point-to-point reach and connectivity
- Low-profile design for added installation flexibility
- Includes a robust mast mount bracket designed to withstand maximum 67 m/s wind speed when installed properly
- Well-designed RF performance permits less physical separation on the tower, adding mounting flexibility at installation sites where space is limited

WISP51583MIMO-SH

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
WISP51583MIMO-SH	Three 3.9 in (10 cm) high performance white RG58, plenum rated	N Female	Heavy-duty mast mounting bracket included
WISP24252MIMO-SH	Two 3.9 in (10 cm) high performance white RG58, plenum rated	N Female	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Nominal Impedance	Polarization	Port-to-Port Isolation
WISP51583MIMO-SH	5.15-5.85 GHz	14 dBi	< 2.0:1	50 ohms	Vertical, +45°, -45°	Ports P1-P3/P2-P3: -30 dB
WISP24252MIMO-SH	2.40-2.50 GHz	12 dBi	< 2.0:1	50 ohms	Vertical, horizontal	Ports P1-P2: -27 dB

MECHANICAL SPECIFICATIONS

Model	Dimensions	Weight
WISP51583MIMO-SH	10.5 L x 3.3 OD (without mount); 12.5 x 3.3 (with mount) in	0.91kg (without mount); 1.19kg (with mount)
WISP24252MIMO-SH	15.1 L x 3.3 OD (without mount); 17.2 x 3.3 (with mount) in	0.92kg (without mount); 1.20kg (with mount)

ENVIRONMENTAL SPECIFICATIONS (BOTH MODELS)

Temperature Range	Humidity	Rated Wind
-40°C to +70°C	5-95%	125 mph

Enclosed Yagi Antenna Series

PCTEL's directional yagis can be used as bridge antennas between two networks or for point-to-point communications. They are field adjustable for vertical or horizontal polarization with matched principal plane beamwidths for optimum performance in either orientation. This design also provides improved front-to-back ratio and sidelobe suppression that reduces interference. All models feature a robust mounting structure for consistent performance regardless of weather conditions.

WISP24015PTNF

MYP24010

Features

- Field adjustable to allow vertical or horizontal polarity
- Optional articulating mount; allows precise adjustment of the antenna both vertically and horizontally
- Matched principal plane beamwidths with excellent sidelobe suppression and cross-polarization rejection of more than 20 dB provides superior signal quality with enhanced gain performance and minimal interference from neighboring radiators
- Attractive weather-proof radome constructed of UV-resistant material provides robust and trouble-free use in harsh outdoor environments

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
MYP24010NF	36 in RG58 Dbl Shield White	N Female	Heavy-duty yagi mounting bracket (included) permits mast mounting on masts up to 2" O.D. Stacking harnesses available to stack two yagis is sold separately (both models).
WISP24015PTNF	18 in RG58 Dbl Shield White	N Female	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth
MYP24010NF	2.4-2.48 GHz	10 dBi	< 1.5:1	55°	55°
WISP24015PTNF	2.4-2.48 GHz	15 dBi	< 1.5:1	30°	30°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Model	Front to Back Ratio	Maximum Power	Nominal Impedance	Polarization
MYP24010NF	23 dB	5 watts	50 ohms	Vertical or horizontal, linear (user adjustable)
WISP24015PTNF	30 dB	5 watts	50 ohms	Vertical or horizontal, linear (user adjustable)

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions	Weight	Lateral Thrust @ Rated Wind	Equivalent Flat Plate Area	Rated Wind
MYP24010NF	4.5 L x 3 OD (11.4 x 7.6 cm)	1 lb (0.5 kg)	5.8 lbs	0.060 sq ft	125 mph
WISP24015PTNF	14 L x 3 OD in (35.6 x 7.6 cm)	1 lb (0.5 kg)	18.3 lbs	0.20 sq ft	125 mph

136-174 MHz Log Periodic Array Antenna

The LPA136174-6NF log periodic antenna has been engineered to meet the requirements of a high gain, broadband, premium quality antenna. This antenna provides broadband coverage over the entire 136-174MHz frequency range without the need for field tuning. The antenna is manufactured using high strength aluminum to withstand heavy ice, high wind and other harsh environmental conditions. The innovative mechanical design has an integral feed line that is protected from the environment and handling during install. The entire antenna is anodized for aesthetic appearance and corrosion resistance. A heavy-duty clamp is supplied which easily permits mounting to a vertical mast. The design allows for field assembly which enables shipping by common carrier.

LPA136174-6NF

Features

- Elements and boom are manufactured from high quality aluminum for optimal strength
- Antenna is anodized for corrosion resistance
- Robust design that can be assembled in the field
- End-fed type N connector for ease of installation

STANDARD CONFIGURATION

Model	Connector	Mount
LPA136174-6NF	N Female	Pipe mount included (1.625 - 4" OD)

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Maximum Power	Nominal Impedance	Polarization
136-174 MHz	8.1 dBi/6 dBd	< 1.7	100°	45°	300 watts	50 ohms	Vertical, linear

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight	Radiator Material
57 L x 43 W x 5.5 D in (144.8 x 109.2 x 13.9 cm)	20 lbs	Aluminum

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS, continued

Rated Wind	Projected Flat Plate Area	Lateral Thrust @ Rated Wind	Bending Moment @ Rated Wind	Temperature Range
150 mph	1.22 ft^2	90 lbf	426 ft-lbs	-40°C to +85°C

700 MHz MIMO Yagi Antenna with Dual Polarization

The BMYD757K-DP is a high gain, premium quality antenna with excellent port to port isolation. Manufactured using high strength 6061-T6 aluminum, they will withstand heavy ice, high wind and other harsh conditions. The entire antenna is anodized for aesthetic appearance and corrosion resistance.

BMYD757K-DP

SA-WC1001AT

Features

- Dual linearly polarized
- Temperature range -40° C to +85° C
- Wind survival rating > 200 mph
- Return loss > 15 dB
- Port to port isolation > 35 dB
- VSWR: ≤ 1.43:1
- Cross polarization discrimination > 25 dB

STANDARD CONFIGURATION

Connector	Elements	Mount
Type-N Female	7	Uses an SA-WC1001AT mount

ELECTRICAL SPECIFICATIONS - RF ANTENNA

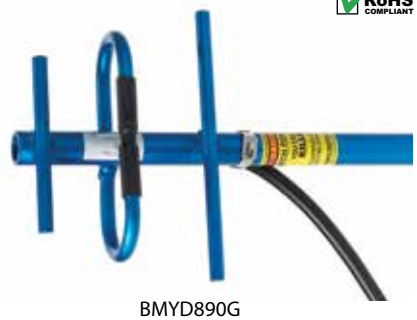
Frequency Range	Gain	Front to Back Ratio	Azimuth and Elevation Half Power Beam Width for 45° Slant Polarization	E-Plane 3 dB Beamwidth	H-Plane 3 dB Beamwidth	Average Power	Nominal Impedance
757-788 MHz	12 dBi	> 10 dB	45°	42°	49°	200 watts	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Dimensions	Weight (Mass)	Cross Sectional Area	Lateral Thrust @ 150 mph	Lateral Thrust Bending Moment @ 150 mph	Lateral Thrust @ 100 mph with 1/2" Ice
37" x 8" x 8" (939.8 mm x 203 mm x 203 mm)	3.25 lbs. (1.47 kg)	.26 ft^2	37.37 lbf (166.24 N)	35.36 lbf-ft (47.94 N-m)	42.13 lbf (187.41 N)

Marathon Yagi Antennas, 700/800/900 MHz Series

PCTEL's Bluewave Marathon 800 MHz yagi series is engineered to meet the requirements of a high gain, broadband, premium quality antenna. The Bluewave yagi series is manufactured using high strength 6061-T6 aluminum to withstand heavy ice, high wind and other harsh conditions. All elements are welded to the boom and the dipole design has an integral feed line welded to the boom for extra strength and electrical conductivity. This eliminates misalignment or fastener problems. The entire antenna is anodized for aesthetic appearance and corrosion resistance. A heavy-duty clamp is supplied which easily permits horizontal or vertical polarization.



BMYD890G

BWC1001 mount

Features

- Elements and boom are manufactured from aircraft quality 6061-T6 aluminum for optimum strength
- Antenna is anodized for aesthetic appearance and corrosion resistance
- Antenna is supplied with a 2' pigtail (RG213) and N Female connector
- Temperature range -40°C to +85°C
- Wind survival rating ≥ 200 mph

STANDARD CONFIGURATION

Model	Cable	Connector	Elements	Mount
BMYD745K	2 ft RG213	N Female	7	BWC1001 Clamp bracket for 1/2"-7/8" diameter yagis. Mounts to masts 1.25"-2.4" OD (included with all models)
BMYD806G	2 ft RG213	N Female	3	
BMYD806K	2 ft RG213	N Female	7	
BMYD806M	2 ft RG213	N Female	11	
BMYD806O	2 ft RG213	N Female	18	
BMYD890G	2 ft RG213	N Female	3	
BMYD890K	2 ft RG213	N Female	7	
BMYD890M	2 ft RG213	N Female	11	
BMYD890O	2 ft RG213	N Female	18	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Front to Back Ratio	Maximum Power	Nominal Impedance
BMYD745K	745-806 MHz	10 dBd	56°	47°	20 dB	200 watts	50 ohms
BMYD806G	806-896 MHz	6.5 dBd	100°	62°	15 dB	200 watts	50 ohms
BMYD806K	806-896 MHz	10 dBd	60°	46°	20 dB	200 watts	50 ohms
BMYD806M	806-896 MHz	12 dBd	44°	38°	20 dB	200 watts	50 ohms
BMYD806O	806-896 MHz	14 dBd	36°	30°	25 dB	200 watts	50 ohms
BMYD890G	890-960 MHz	6.5 dBd	100°	62°	15 dB	200 watts	50 ohms
BMYD890K	890-960 MHz	10 dBd	56°	46°	20 dB	200 watts	50 ohms
BMYD890M	890-960 MHz	12 dBd	40°	34°	20 dB	200 watts	50 ohms
BMYD890O	890-960 MHz	14 dBd	32°	26°	25 dB	200 watts	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions*	Weight	Cross Sectional Area	Lateral Thrust @ 150 mph	Lateral Thrust Bending Moment @ 150 mph	Lateral thrust @ 100 mph with 1/2" ice
BMYD745K	26" x 7.5"	2.2 lbs (1.0 kg)	0.28 sq ft	19.7 lbs	18.3 lb-ft	28.1 lb
BMYD806G	12" x 6.5"	1.5 lbs (0.7 kg)	0.106 sq ft	6.24 lbs	2.16 lb-ft	8.84 lb
BMYD806K	24" x 6.5"	2 lbs (0.9 kg)	0.223 sq ft	14.4 lbs	12.1 lb-ft	19.4 lb
BMYD806M	36" x 7.2"	2.1 lbs (.95 kg)	0.347 sq ft	14.4 lbs	12.1 lb-ft	19.4 lb
BMYD806O	60" x 7"	3.3 lbs (1.5 kg)	0.618 sq ft	51.5 lbs	108 lb-ft	63.7 lb
BMYD890G	12" x 6.75"	1.4 lbs (.64 kg)	0.103 sq ft	6.2 lbs	2.0 lb-ft	7.2 lb
BMYD890K	23.9" x 6.75"	2.1 lbs (.95 kg)	0.219 sq ft	16.8 lbs	14.1 lb-ft	24.3 lb
BMYD890M	36" x 6.75"	2.5 lbs (1.1 kg)	0.332 sq ft	26.7 lbs	35.5 lb-ft	35.5 lb
BMYD890O	63" x 6.6"	3.6 lbs (1.6 kg)	0.624 sq ft	45.5 lbs	119 lb-ft	50.6 lb

* Dimension do not include antenna cable.

Marathon Yagi Antennas, 400 MHz Series

PCTEL's Bluewave Marathon 400 MHz frequency series is engineered to meet the requirements of a high gain, broadband, premium quality antenna. The Bluewave yagi series is manufactured using high strength 6061-T6 aluminum to withstand heavy ice, high wind and other harsh conditions. All elements are welded to the boom and the dipole design has an integral feed line welded to the boom for extra strength and electrical conductivity. This eliminates misalignment or fastener problems. The entire antenna is anodized for aesthetic appearance and corrosion resistance. A heavy-duty clamp is supplied which easily permits horizontal or vertical polarization.

BMYD403G

BWC1001A mount

Features

- Elements and boom are manufactured from aircraft quality 6061-T6 aluminum for optimum strength
- Antenna is anodized aesthetic appearance and for corrosion resistance
- Antenna is supplied with a 2' pigtail (RG213) and N Female connector
- Wind survival rating >150 mph

STANDARD CONFIGURATION

Model	Cable	Connector	Elements	Mount
BMYD403G	2 ft RG213	N Female	3	BWC1001 Clamp bracket for 1/2"-7/8" diameter yagis. Mounts to masts 1.25"-2.4" OD (included with all models)
BMYD403K	2 ft RG213	N Female	7	
BMYD403M	2 ft RG213	N Female	11	
BMYD450G	2 ft RG213	N Female	3	BWC1001A clamp bracket for 3/4"-1" diameter yagis. Mounts to masts 1.25"-2.4" OD included
BMYD450K	2 ft RG213	N Female	7	

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Front to Back Ratio	Maximum Power	Nominal Impedance
BMYD403G	403-430 MHz	6.5 dBd	104°	62°	15 dB	250 watts	50 ohms
BMYD403K	403-430 MHz	10 dBd	52°	46°	20 dB	250 watts	50 ohms
BMYD403M	403-430 MHz	12 dBd	44°	39°	20 dB	250 watts	50 ohms
BMYD450G	450-470 MHz	6.5 dBd	104°	65°	15 dB	250 watts	50 ohms
BMYD450K	450-470 MHz	10 dBd	50°	45°	20 dB	250 watts	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions*	Weight	Cross Sectional Area	Lateral Thrust @ 100 mph	Lateral Thrust @ 100 mph with ½" of Ice	Bending Moment @ 100 mph
BMYD403G	18" x 13.9" x 3.2"	2 lbs (0.9 kg)	0.19 sq ft	6.23 lbs	19.44 lbs	4.19 lb-ft
BMYD403K	44" x 14.4" x 3.2"	4 lbs (1.8 kg)	0.48 sq ft	18.41 lbs	53.62 lbs	29.4 lb-ft
BMYD403M	72" x 14.4" x 3.2"	3.5 lbs (1.6 kg)	0.84 sq ft	32.3 lbs	86.5 lbs	87.7 lb-ft
BMYD450G	18" x 12.9" x 3.2"	2 lbs (0.9 kg)	0.18 sq ft	5.85 lbs	18.23 lbs	3.87 lb-ft
BMYD450K	42" x 11.8" x 3.2"	3 lbs (1.4 kg)	0.46 sq ft	16.72 lbs	48.49 lbs	25.4 lb-ft

* Dimension do not include antenna cable.

Bluewave Guardian Yagi Antennas

PCTEL's Bluewave Guardian series has been engineered to provide high gain broadband performance. Solid 3/8" aluminum elements complement the fully welded dipole on the boom. The black powder coat BGYD890M comes with an integral low loss 2' RG213 feed line with a standard N Female connector. High strength mounting clamp is supplied for vertical or horizontal polarization.

BGYD450K

BWC1001 mount

SA-WC1022 mount

Features

- Dipole fully-welded to boom
- Black powder coated aluminum
- Mounting clamp included
- Antenna is supplied with a 2' pigtail (RG213) and N Female connector
- Elements and boom are crafted from high strength 6061-T6 aluminum
- Wind rated > 150 mph
- Temperature range -40°C to +85°C

STANDARD CONFIGURATION

Model	Cable	Connector	Elements	Mount
BGYD806K	2 ft RG213	N Female	7	SA-WC1022
BGYD890G	2 ft RG213	N Female	3	SA-WC1022
BGYD890K	2 ft RG213	N Female	7	SA-WC1022
BGYD890M	2 ft RG213	N Female	11	SA-WC1022

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Gain	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Front to Back Ratio	Maximum Power	Nominal Impedance
BGYD806K	806-896 MHz	10 dBd	60°	46°	20 dB	200 watts	50 ohms
BGYD890G	890-960 MHz	6.5 dBd	110°	62°	15 dB	200 watts	50 ohms
BGYD890K	890-960 MHz	10 dBd	56°	46°	20 dB	200 watts	50 ohms
BGYD890M	890-960 MHz	12 dBd	40°	34°	20 dB	200 watts	50 ohms

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions*	Lateral Thrust @ 100 mph	Lateral Thrust @ 100 mph with ½" of Ice	Bending Moment @ 100 mph	Weight	Cross Sectional Area
BGYD806K	24" x 6.5" x 2.5"	7.67 lb	24.86 lb	6.53 lb-ft	2 lbs (0.91 kg)	0.20 sq ft
BGYD890G	12" x 7.3" x 2.5"	3.68 lb	9.79 lb	1.0 lb-ft	1.5 lbs (0.68 kg)	0.08 sq ft
BGYD890K	23.8" x 6.4" x 2.5"	7.53 lb	24.4 lb	6.35 lb-ft	2 lbs (0.91 kg)	0.20 sq ft
BGYD890M	36" x 6.8" x 2.5"	11.86 lb	36.99 lb	15.8 lb-ft	2.5 lbs (1.13 kg)	0.31 sq ft

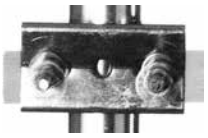
* Dimension do not include antenna cable.

Aluminum Yagi Antennas, VHF, UHF & 800/900 MHz

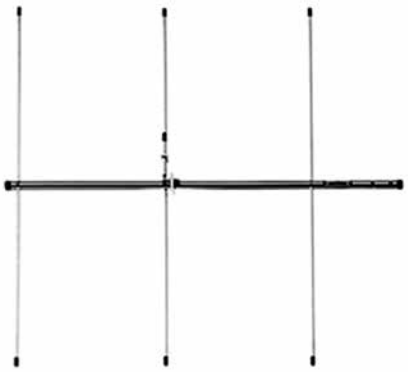
PCTEL's MYA yagis are unsurpassed in their price-to-performance ratio. All models feature rugged 6061-T6 seamless aluminum construction, stainless steel hardware, and through boom mounting of all elements for years of reliable service. Elements are DC grounded to the boom. These antennas are UPS shippable.

Features

- Stainless steel hardware
- Stacking harness available for phasing two or more antennas
- Heavy-duty, double-walled aluminum boom
- DC grounded
- MYK1 mount
- Wind Load Rating 100 mph



MYK1



MYA1503K(N)*

STANDARD CONFIGURATION

Model	Connector	Elements
MYA1503K(N)*	SO239 standard, N Female is optional	3
MYA4503(N)	SO239 standard, N Female is optional	3
MYA4505(N)	SO239 standard, N Female is optional	5
MYA8063	N Female	3
MYA8066	N Female	6
MYA9153	N Female	3
MYA93012	N Female	12
MYA9303	N Female	3
MYA9306	N Female	6

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Model	Frequency Range	Factory Tuned Frequency	Gain	Bandwidth @ 1.5:1 VSWR	Azimuth Half Power Beamwidth	Elevation Half Power Beamwidth	Front to Back Ratio	Maximum Power	Nominal Impedance
MYA1503K(N)*	150-174 MHz	150 MHz	9.2 dBi	0.7 MHz	72°	57°	17 dB	250 watts	50 ohms
MYA4503(N)	450-470 MHz	460 MHz	9.2 dBi	20 MHz	72°	57°	17 dB	300 watts	50 ohms
MYA4505(N)	450-470 MHz	460 MHz	11.3 dBi	20 MHz	56°	48°	20 dB	300 watts	50 ohms
MYA8063	806-866 MHz	813 MHz	8.1 dBi	60 MHz	72°	57°	15 dB	100 watts	50 ohms
MYA8066	806-866 MHz	813 MHz	11.1 dBi	60 MHz	42°	40°	16 dB	100 watts	50 ohms
MYA9153	896-940 MHz	915 MHz	8.1 dBi	75 MHz	72°	57°	15 dB	100 watts	50 ohms
MYA93012	896-970 MHz	930 MHz	13.1 dBi	75 MHz	40°	42°	20 dB	100 watts	50 ohms
MYA9303	896-970 MHz	930 MHz	8.1 dBi	50 MHz	72°	57°	15 dB	100 watts	50 ohms
MYA9306	896-970 MHz	930 MHz	11.1 dBi	75 MHz	48°	56°	20 dB	100 watts	50 ohms

* Field tunable antennas. Suffix "N" indicates "N" connector.

Aluminum Yagi Antennas, VHF, UHF & 800/900 MHz

MECHANICAL SPECIFICATIONS

Model	Dimensions	Weight	Lateral Thrust @ 100mhp	Equivalent Flat Plate Area
MYA1503K(N)*	Boom Length: 42", Boom Diameter: 7/8"	3 lbs (1.4 kg)	22.1 lbs	.36 sq ft
MYA4503(N)	Boom Length: 23", Boom Diameter: 7/8"	1.5 lbs (0.7 kg)	7.98 lbs	.15 sq ft
MYA4505(N)	Boom Length: 35.5", Boom Diameter: 7/8"	2.0 lbs (0.9 kg)	12.35 lbs	.23 sq ft
MYA8063	Boom Length: 17", Boom Diameter: 7/8"	1.5 lbs (0.7 kg)	4.29 lbs	.10 sq ft
MYA8066	Boom Length: 28", Boom Diameter: 7/8"	2 lbs (0.9 kg)	8.75 lbs	.17 sq ft
MYA9153	Boom Length: 17", Boom Diameter: 7/8"	1.5 lbs (1.5 kg)	4.13 lbs	.09 sq ft
MYA93012	Boom Length: 48", Boom Diameter: 7/8"	2.5 lbs (1.1 kg)	16.1 lbs	.27 sq ft
MYA9303	Boom Length: 17", Boom Diameter: 7/8"	1.5 lbs (0.7 kg)	4.13 lbs	.09 sq ft
MYA9306	Boom Length: 23", Boom Diameter: 7/8"	1.5 lbs (0.7 kg)	8.43 lbs	.16 sq ft

Mounts for Omnidirectional Antennas

STANDARD CONFIGURATION

Model	Description	Application	Qty per Assembly
MMK4	Heavy-duty fiberglass base station mount	For mounting an antenna with 2-1/2" maximum diameter onto a 2-1/2" maximum outer diameter mast.	2
MMK8A	Aluminum MFB mount bracket	For mounting a 1-1/4" diameter antenna to a 2-1/2" maximum diameter mast.	1
MMK9	Aluminum MFB mount bracket	For mounting a 1-5/16" diameter antenna to a 2-1/2" maximum diameter mast.	1
MMK12	Heavy-duty sand cast mount bracket	For mounting yagi or omnidirectional antenna up to 3.00" maximum diameter mast.	1
BAM1005	Light duty parallel or perpendicular pipe to pipe clamp	Mounts to legs, towers, accessories with 1.5 - 2.4" OD pipe.	1
BAM1009	Aluminum L-bracket for mounting to parallel or perpendicular pipe or mast	Mounts to legs, towers, accessories with 1.5-2.4" OD pipe. Has 0.625" diameter hole for mounting connectors or stud mounts.	1
BAM1011-HCA	Black aluminum L-bracket for mounting to parallel or perpendicular pipe or mast	Mounts to legs, towers, accessories with 1.5-2.4" OD pipe. Has 0.625" diameter hole for mounting connectors or stud mounts.	1
BAM1017	Kit, universal utility pole mounting bracket	Sized for 5/8-11 pole hardware with 15-in maximum spacing (pole hardware not included). Features multiple carriage bolt holes for various bases.	1


BAM1017


BAM1005


BAM1009


BAM1011-HCA


MMK4


MMK8A


MMK9


MMK12

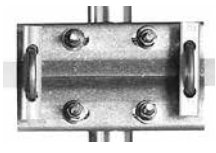
Mounts for Directional Antennas

STANDARD CONFIGURATION

Model	Description	Application	Qty per Assembly
MBSWM	Wall mount	For wall mounting antennas of up to 2-1/4" in diameter.	1
MPAB14	Heavy-duty outdoor cast aluminum adjustable hose clamp	Adjustable outdoor hose clamp for XF series panel antennas for mounting up to 1.6" maximum diameter	1
MYK3	Heavy-duty mount for 7/8" boom yagis	For mounting 7/8" diameter boom yagis to a 2" maximum diameter mast.	1
MYK10	Heavy-duty cast yagi bracket	For mounting a 7/8" OD yagi to a 2-1/2" maximum OD mast. Adjustable for vertical or horizontal polarization.	1
BWC1001	Yagi clamp	Fits mast OD of 0.5 - 0.84". Mounts to legs, towers, accessories with 1.25 - 2.4" OD	1
BWC1001A	Yagi clamp	Fits mast OD of 0.75 - 1". Mounts to legs, towers, accessories with 1.25 - 2.4" OD	1
BWC1015	Rotational perpendicular yagi clamp	Fits mast OD of 0.5 - .84". Mounts 90° to legs, towers, accessories with 6.5 - 15" OD	1


MBSWM


MPAB14


MYK3


MYK10


BWC1001A


BWC1015

FMD9023-CP Power Line Monitoring Antenna

The low-profile FMD9023-CP antenna has a circular polarized hemispherical radiation pattern designed to cover 902-928 MHz frequencies. The circular polarization enables communication regardless of polarization of paired antennas.

Features

- Low-profile
- Compact overmolded design
- Ideal for pad mount and enclosure installations where low visual impact is necessary to discourage tampering or vandalism
- RF performance, including circular polarization, pattern coverage, and gain levels, optimized for deployment in electric utility networks
- Incorporates an integrated type N Female bulkhead connector with optional integrated gasket to secure antenna to the mounting surface and provide a watertight seal

FMD9023-CP

STANDARD CONFIGURATION

Model	Connector
FMD9023-CP	N Female

ELECTRICAL SPECIFICATIONS - RF ANTENNA

Frequency Range	Gain	VSWR	Main Beam 0° Beamwidth	Main Beam 90° Beamwidth
902-928 MHz	3 dBic	< 1.5:1	105°	105°

ELECTRICAL SPECIFICATIONS - RF ANTENNA, continued

Nominal Impedance	Polarization
50 ohms	Right hand circular

MECHANICAL SPECIFICATIONS

Dimensions	Weight	Temperature Range
3.98 L x 3.98 W x 0.52 H in (101 L x 101 W x 13 H mm)	0.25 lbs	-40°C to +70°C