NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS MPRD Parabolic Reflector Antennas

4.9-6.0 GHz Wideband Dual Polarized Parabolic Reflector Antenna Series with Radome NEW

The MPRD prime focus parabolic reflector antenna suppresses extraneous sidelobe and cross-polarized energy. These antennas feature a micro fine elevation and azimuth adjustment kit. The MPRD series is provided with a radome as a standard feature.

Features

- · Availability in two and three foot diameter sizes
- · Radome comes standard and installed
- · Rear mounted feed radome never has to be removed
- · Linear, continuous polarization adjustment
- · Fine adjustment mechanism for elevation and azimuth
- Assembled and attached offset mount allows easy access to connector
- Double saddle mounting brackets will accommodate pipe attachments ranging from 1.625" to 4.5" OD
- Robust mounting structure. Three point mount attachment improves stability and prevents reflector distortion and mechanical oscillation
- 2 foot versions are UPS shippable

Antenna Electrical Specifications

Model	Frequency Range	Nominal Gain (+/- 0.5 dB)	3 dB Beamwidth, Nominal
MPRD2449	4.9-6.0 GHz	28.1 dBi at 5.15 GHz 29.4 dBi at 5.875 GHz	6°
MPRD3649	4.9-6.0 GHz	31.0 dBi at 5.15 GHz 32.0 dBi at 5.875 GHz	4°

Mechanical Specifications

Model	Wind Survival with 1/2" of radial ice	Temperature Range	Diameter
MPRD2449	125 mph	-40°C to +80°C	26" (66 cm)
MPRD3649	125 mph	-40°C to +80°C	36" (91 cm)







Technical Data

General Specifications: Prime Focus Parabolic Reflector Antenna
Maximum Power: 25 watts
Nominal Impedance: 50 ohms
SWR/return loss: < 1.5 / >13.9 dB for 5.15-6.0 GHz operation < 1.7/ >12 dB for 4.9-5.15 GHz operation
Polarization: Dual linear, continuously adjustable
Front-to-back Ratio: 36 dB (MPRD2449) 43 dB (MPRD3649)
Interport Isolation: > 35 dB
Cross Polarization Discrimination: > 30 dB
Interface Connector: Type N female
Mount Interface: Accommodates 1.625" to 4.5" pipe OD

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS MPRC Prime Focus Parabolic Reflector Antennas

2.3 to 2.7 GHz Parabolic Reflector Antenna Series with Radome

The MPRC prime focus parabolic reflector antenna series suppresses extraneous sidelobe and cross-polarized energy. These antennas feature a micro fine elevation and azimuth adjustment kit. The MPRC series is provided with a radome as a standard feature.

Features

- Availability in two and three foot diameter sizes
- · Radome comes standard and installed
- Rear mounted feed radome never has to be removed
- Continuous polarization adjustment
- · Fine adjustment mechanism for elevation and azimuth
- Assembled and attached offset mount allows easy access to connector
- Double saddle mounting brackets will accommodate pipe attachments ranging from 1.625" to 4.5" OD
- Robust mounting structure. Three point mount attachment improves stability and prevents reflector distortion and mechanical oscillation
- 2 foot versions are UPS shippable

Antenna Electrical Specifications

Model	Frequency Range	Nominal Gain (+/- 0.5 dB at mid band)	3 dB Beamwidth, Nominal
MPRC2423	2.3 - 2.7 GHz	21.5 dBi	12.4°
MPRC3623	2.3 - 2.7 GHz	24.5 dBi	9.0°

Mechanical Specifications

Model	Wind Survival with 1/2" of radial ice	Temperature Range	Diameter
MPRC2423	125 mph	-40°C to +80°C	26″
MPRC3623	125 mph	-40°C to +80°C	36″







Technical Data

General Specifications: Prime Focus Parabolic Reflector Antenna
Maximum Power: 5 watts
Nominal Impedance: 50 ohms
SWR/return loss: < 1.5 / >13.9 dB
Polarization: Linear, continuously adjustable
Front-to-back Ratio: 28 dB (MPRC2423) 29 dB (MPRC3623)
Interface Connector: Type N female
Mount Interface: Accommodates 1.625" to 4.5" pipe OD

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS MPRC Prime Focus Parabolic Reflector Antennas

3.3 to 3.8 GHz Parabolic Reflector Antenna Series with Radome $^{\mbox{\scriptsize NEW}}$

The MPRC prime focus parabolic reflector antenna series suppresses extraneous sidelobe and cross-polarized energy. These antennas feature a micro fine elevation and azimuth adjustment kit. The MPRC series is provided with a radome as a standard feature.

Features

- Availability in two and three foot diameter sizes
- Radome comes standard and installed
- Rear mounted feed radome never has to be removed
- · Continuous polarization adjustment
- · Fine adjustment mechanism for elevation and azimuth
- · Assembled and attached offset mount allows easy access to connector
- Double saddle mounting brackets will accommodate pipe attachments ranging from 1.625" to 4.5" OD
- Robust mounting structure. Three point mount attachment improves stability and prevents reflector distortion and mechanical oscillation
- 2 foot versions are UPS shippable

Antenna Electrical Specifications

Model	Frequency Range	Nominal Gain (+/- 0.5 dB at mid band)	3 dB Beamwidth, Nominal
MPRC2434	3.3 - 3.8 GHz	25.0 dBi	8.7°
MPRC3634	3.3 - 3.8 GHz	27.8 dBi	6.3°

Mechanical Specifications

Model	Wind Survival with 1/2" of radial ice	Temperature Range	Diameter
MPRC2434	125 mph	-40°C to +80°C	26″
MPRC3634	125 mph	-40°C to +80°C	36″





Technical Data

General Specifications: Prime Focus Parabolic Reflector Antenna
Maximum Power: 5 watts
Nominal Impedance: 50 ohms
SWR/return loss: < 1.5 / >13.9 dB
Polarization: Linear, continuously adjustable
Front-to-back Ratio: 32 dB (MPRC2434) 33 dB (MPRC3634)
Interface Connector: Type N female
Mount Interface: Accommodates 1.625" to 4.5" OD

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS MPRC Prime Focus Parabolic Reflector Antennas







Technical Data

General Specifications: Prime Focus Parabolic Reflector Antenna
Maximum Power: 5 watts
Nominal Impedance: 50 ohms
SWR/return loss: < 1.5 / >13.9 dB
Polarization: Linear, continuously adjustable
Front-to-back Ratio: 36 dB (MPRC2449) 43 dB (MPRC3649)
Interface Connector: Type N female
Mount Interface: Accommodates 1.625" to 4.5" pipe OD

For detailed specifications, visit http://antenna.pctel.com.

4.9 to 6.0 GHz Wideband Parabolic Reflector Antenna Series with Radome

The MPRC prime focus parabolic reflector antenna series suppresses extraneous sidelobe and cross-polarized energy. These antennas feature a micro fine elevation and azimuth adjustment kit. The MPRC series is provided with a radome as a standard feature.

Features

- · Availability in two and three foot diameter sizes
- Radome comes standard and installed
- Rear mounted feed radome never has to be removed
- · Linear, continuous polarization adjustment
- · Fine adjustment mechanism for elevation and azimuth
- · Assembled and attached offset mount allows easy access to connector
- Double saddle mounting brackets will accommodate pipe attachments ranging from 1.625" to 4.5" OD
- Robust mounting structure. Three point mount attachment improves stability and prevents reflector distortion and mechanical oscillation
- 2 foot versions are UPS shippable

Antenna Electrical Specifications

Model	Frequency Range	Nominal Gain (+/- 0.5 dB at mid band)	3 dB Beamwidth, Nominal
MPRC2449	4.9 - 6.0 GHz	27.7 dBi at 4.9 GHz 28.5 dBi at 5.25 GHz 29.0 dBi at 5.8 GHz	6°
MPRC3649	4.9 - 6.0 GHz	30.4 dBi at 4.9 GHz 31.2 dBi at 5.25 GHz 32.0 dBi at 5.8 GHz	4°

Model	Wind Survival with 1/2" of radial ice	Temperature Range	Diameter
MPRC2449	125 mph	40°C to +80°C	26" (66 cm)
MPRC3649	125 mph	40°C to +80°C	36" (91 cm)

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS Sector Series Antennas

Adjustable or Fixed Sector Panel Antennas

The MSP series sector panel covers the 2.4 GHz ISM band and provides field adjustable horizontal beamwidths of 45°, 60°, 90° or 120°. This unique design allows a system installer to stock a single antenna and field adjust it to the desired beamwidth, making it useful for wireless broadband applications where coverage of a geographical sector is desired. The panel can also be ordered with fixed beamwidths. This line also includes a compact 90° sector model that measures less than 8 inches long, for installations where space is very limited.

In many applications, sector panels are used to provide omnidirectional coverage by using, for example, three radios and three 120° sector antennas to provide 360° coverage. This results in a stronger and more focused signal than that of a single omnidirectional antenna. It also provides a more robust design. The MSP24013MB features industry leading front-to-back ratios of more than 42 dB at 45°, 60° and 90° and over 32 dB at 120° with excellent cross pole discrimination.

Features

- Adjustable multiple beamwidth sectors. A single antenna can be utilized to cover several geographical sectors.
- Three sectors with three data radios can be installed as an array for omnidirectional coverage. Provides a stronger, more focused signal than that of a standard omnidirectional antenna.
- Industry leading front-to-back ratios. Ensures that the radiated energy is focused towards its target, and not to the back or sides of the antenna.



Technical Data

General Specifications: 2.4 GHz sector panel antennas
Maximum Power Input: 50 watts
Polarization: Vertical
Nominal Impedance: 50 ohms
VSWR: < 1.5:1
Radome Material: Off white ASA plastic with UV resistance
Lighting Protection: DC grounded
Connector Options: Type N, female. Other connector options available
Mounting Method: Adjustable stainless steel bracket, +/- 11° of uptilt or downtilt Pipe diameter: 0.75 thru 2.4″ OD (19-60 mm)

For detailed specifications, visit http://antenna.pctel.com.



The MSP24013MB allows horizontal beamwidth adjustments without having to replace the antenna. Its overall design is one of the most compact currently available on the market.



MSP24013MB



Sector panel on adjustable bracket

Model	Frequency Range	Nominal Gain	Horizontal Plane Beamwidth	E-Plane Beamwidth	Front-to- Back Ratio	Typical Cross Poll Discrimination
MSP24013MB	2.4-2.5 GHz	13 dB @ 120° 14 dBi @ 90° 16 dBi @ 60° 17 dBi @ 45°	120°, 90°, 60° and 45°	16°	> 32 dB @ 120° > 42 dB @ 90° > 42 dB @ 60° > 42 dB @ 45°	270°-0°, 0°-90° = -20 dB 235°-270°, 90°-135° = -28 dB 180°-235°, 135°-180° = -32 dB
MSP24013-120	2.4-2.5 GHz	13 dBi	120°	16°	> 32 dB	(all models)
MSP24014-90	2.4-2.5 GHz	14 dBi	90°	16°	> 42 dB	270°-0°, 0°-90° = -20 dB 235°-270°, 90°-135° = -28 dB
MSP24016-60	2.4-2.5 GHz	16 dBi	60°	16°	> 42 dB	180°-235°, 135°-180° = -32 dB

Model	Dimensions	Weight (Mass)	Temperature Range	Rated Wind Velocity	Lateral Thrust at Rated Wind
MSP24013MB	21.5" L x 6.5" W x 2.8" D (546 x 16.5 x 7.2 mm)	4 lbs (1.8 kg)	-30°C to +75°C	125 mph (200 km/h)	43 lbs (19.5 kg)
MSP24013-120	21.5" L x 6.5" W x 2.8" D (546 x 16.5 x 7.2 mm)	4 lbs (1.8 kg)	-30°C to +75°C	125 mph (200 km/h)	43 lbs (19.5 kg)
MSP24014-90	21.5" L x 6.5" W x 2.8" D (546 x 16.5 x 7.2 mm)	4 lbs (1.8 kg)	-30°C to +75°C	125 mph (200 km/h)	43 lbs (19.5 kg)
MSP24016-60	21.5" L x 6.5" W x 2.8" D (546 x 16.5 x 7.2 mm)	4 lbs (1.8 kg)	-30°C to +75°C	125 mph (200 km/h)	43 lbs (19.5 kg)

ISM Sector Panel Antennas

The WISP sector panel provides coverage of 2.4 GHz to 2.5 GHz frequencies with a VSWR performance of less than 1.5:1. Its design provides superior front-to-back ratio performance that ensures that the radiated energy is focused towards its coverage area.

The WISP24017MBH provides vertical or horizontal polarization options, featuring field adjustable horizontal beamwidths of 60° or 90.° Its efficient gain performance and compact UV resistant housing provide outstanding coverage and maximum installation flexibility where tower space is limited. In addition, it includes an adjustable pipe mount that permits +/-15° uptilt or downtilt of the antenna to adjust to the requirements of the coverage area.

Features

- Adjustable multiple beamwidth sectors of 45°, 60°, 90° and/or 120°
- Outstanding front-to-back ratio ensures that the radiated energy is targeted towards the area of coverage, and not out of it where it could be prone to interference.
- Included adjustable pipe mount permits uptilt or downtilt adjustment of +/-15° for more precise coverage of the geographic area.
- Models are available for vertical and horizontal polarization.
- Industry leading front-to-back ratios. Ensure that the radiated energy is focused towards its target, and not to the back or sides of the antennas.
- Attractive, streamline design reduces wind loading for easier handling during installation.



Technical Data

General Specifications: Horizontal polarization sector panel antenna User adjustable beamwidth. Optional 45° director flaps sold separately.
Maximum Power Input: 20 watts (WISP24017MBH only) 30 watts (All models except WISP24017MBH)
Polarization: Horizontal (WISP24017MBH) Vertical (WISP2401490PTNF and WISP24013120PTNF)
Nominal Impedance: 50 ohms
VSWR: < 1.5:1
Radome Material: Gray UV resistant plastic
Lighting Protection: DC grounded
Backplane: High strength aluminum extrusion
Termination: N, female bulkhead
Mounting Method: Adjustable pipe mount (included)

For detailed specifications, visit http://antenna.pctel.com.



The WISP model antennas horizontally polarized sector panel antenna allows horizontal beamwidth adjustments of 45°, 60°, 90° and 120° without having to replace the antenna.



WISP24013120PTNF



WISP2401490PTNF

Model	Frequency Range	Nominal Gain +/5	Horizontal Plane Beamwidth	E-Plane Beamwidth	Front-to- Back Ratio	Typical Cross Poll Discrimination	Polarization
WISP24017MBH	2.4-2.5 GHz	13, 14, 16 or 17 dBi user selectable	120°, 90°, 60°, 45°	15°	> 30 dB @ 120°, 90°, 60° > 26 dB @ 45°	> 26 dB	Horizontal
WISP2401490PTNF	2.4-2.48 GHz	14 dBi	90°	14°	> 23 dB	> 20 dB	Horizontal
WISP24013120PTNF	2.4-2.48 GHz	13 dBi	120°	16°	> 23 dB	> 20 dB	Vertical

Model	Dimensions	Weight (Mass)	Temperature Range	Rated Wind Velocity	Lateral Thrust at Rated Wind	Equivalent Flat Plate Area
WISP24017MBH	24" L x 7" W x 3" D (609 x 178 x 76 mm)	4.5 lbs (2.1 Kg)	-30°C to 75° C	125 mph	60 lbf without flaps 120 lbf with flaps	.44 ft ² without flaps 1.36 ft ² with flaps
WISP2401490PTNF	19.8" L x 3.1" W x 1.5" D	2.5 lbs	-30°C to 75° C	125 mph	25.4 lbf @ 125 mph	0.28 ft ²
WISP24013120PTNF	19.8" L x 3.1" W x 2.2" D	2.5 lbs	-30°C to 75° C	125 mph	25.4 lbf @ 125 mph	0.28 ft ²

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS Panel Base Station Antennas

AMPS, PCS, GSM and DCS Quad Band Directional Panel Antennas

This directional panel antenna is designed to cover 806-960 MHz and 1710-2170 MHz frequencies, obtaining maximum gain in an attractive, low-profile package.

This antenna provides efficient and stable performance across the AMPS, PCS, GSM, DCS 1800 and UMTS bands and can be mounted indoors or outdoors.

Features

- Highly efficient antenna element provides high performance in an attractive, compact housing.
- UL94-V0 plastic and PC board. Provides UL's high flame retardant rating allowing maximum placement flexibility. Meets stringent building fire rating codes.
- Attractive, low profile housing. Blends well with indoor and outdoor environments where aesthetic considerations are important.
- Optional adjustable mounting brackets for indoor and outdoor mounting. Provide maximum flexibility for indoor or outdoor installations.

Antenna Electrical Specifications

Model	Frequency Range	Gain	Horizontal Beamwidth	Vertical Beamwidth	Front-to-Back Ratio
MPMB80621MPTC	806-960 MHz	7 dBi	70°	67°	> 15 dB
	1.71-2.17 GHz	7.5 dBi	75°	55°	> 20 dB

Mechanical Specifications

Model	Dimensions	Weight (Mass)	Temperature Range	Wind Loading (Frontal) @ 100 mph Wind
MPMB80621MPTC	8.8" x 8.1" x 1.6" (22.4 x 20.6 x 4.06 cm)	1.2 lbs (0.54 kg)	-40°C to +70°C	27.9 lbs



MPMB80621MPTC on MPAB12 mount



MPMB80621MPTC on MPAB8 heavy duty bracket



Technical Data

Maximum Power Input: 20 watts
Polarization: Linear, vertical
Nominal Impedance: 50 ohms
VSWR: < 2.0:1
Radome Material: UL 94-V0 plastic
Cable: 3' (91.4 cm) RG-58/U
Connector: TNC male
Mounting Method Wall or mast mount
Mounting Options (mounts sold separately): MPAB11 short adjustable indoor mount MPAB12 long adjustable indoor corner mount MPAB7 heavy duty outdoor adjustable mount with +/-35° uptilt/downtilt adjustment MPAB8 heavy duty outdoor adjustable mount with 17° uptilt/downtilt adjustment

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS Panel Base Station Antennas



MP series antenna



MP8066XFPT on MPAB12 mount



MP8066XFPT on MPAB8 heavy duty bracket



800/900 MHz Directional Panel Antennas

These directional panel antennas are designed to cover 800/900 MHz frequencies with a VSWR of less than 1.5:1, obtaining maximum gain with an attractive, low-profile package. All models provide efficient and stable performance across the band and can be mounted indoors or outdoors.

Features

- Highly efficient antenna element provides high performance in an attractive, compact housing.
- UL94-V0 plastic and PC board. Provides UL's high flame retardant rating allowing maximum placement flexibility. Meets stringent building fire rating codes.
- Attractive, low profile housing. Blends well with indoor and outdoor environments where aesthetic considerations are important.
- Corner exit RG-58/U pigtail design. Permits the linear polarized panel to be mounted in vertical or horizontal polarity with a wide variety of connectors.
- Optional UL 910 rated Plenum cable. Allows the cable to be installed in the strictest indoor mounting locations, including air ducts.
- Optional adjustable mounting brackets for indoor and outdoor mounting. Provide maximum flexibility for indoor or outdoor installations.

Technical Data

Maximum Power Input: 20 watts
Polarization: Linear, vertical/horizontal (all models but MP9026CPLXFPT and MP9026CPRXFPT) Left hand circular (MP9026CPLXFPT only) Right hand circular (MP9026CPRXFPT only)
Nominal Impedance: 50 ohms
VSWR: < 1.5:1
Radome Material: UL 94-V0 plastic
Cable: 12" (30.5 cm) RG-58/U (UL910 rated cable optional)
Connector: N female standard. Other options: (add connector part # after PT:)
Example: MP8066XFPTBN (panel with BNC connector)
Male BNC (part #BN) Female N (part #NF) Male N (part #NM) Female SMA (part #FSMA) Male SMA (part #MSMA) Female SMA, reverse threaded (part #FSMART) Male SMA, reverse threaded (part #MSMART) Reverse polarity TNC plug (part #MRPC) Male TNC (part #C) Male Mini-UHF (part #PL) Female FME (part #FFME)
Mounting Options: MPAB11 short adjustable indoor mount MPAB12 long adjustable indoor corner mount MPAB7 heavy duty outdoor adjustable mount with +/-35° uptilt/downtilt adjustment MPAB8 heavy duty outdoor adjustable mount with 17° uptilt/downtilt adjustment

Model	Frequency Range	Gain	3 dB Horizontal Beamwidth	3 dB Vertical Beamwidth	Front-to-Back Ratio
MP8066XFPT	806-960 MHz	6 dB	70°	60°	> 17 dB
MP9027XFPT	902-928 MHz	7 dB	65°	65°	> 17 dB
MP9026CPLXFPT	902-928 MHz	6.4 dBdc	65°	65°	> 20 dB
MP9026CPRXFPT	902-928 MHz	6.4 dBdc	65°	65°	> 20 dB
MP19013XFPT	1.85-1.99 GHz	12.5 dBi	40°	35°	> 18 dB

Model	Dimensions	Weight (Mass)	Temperature Range	Wind Loading (Frontal) @ 100 mph Wind
MP8066XFPT	8.8" x 8.1" x 1.6" (22.4 x 20.6 x 4.06 cm)	1.2 lbs (0.54 kg)	-40°C to +70°C	27.9 lbs
MP9027XFPT	8.8" x 8.1" x 1.6" (22.4 x 20.6 x 4.06 cm)	1.2 lbs (0.54 kg)	-40°C to +70°C	27.9 lbs
MP9026CPLXFPT	8.8" x 8.1" x 1.6" (22.4 x 20.6 x 4.06 cm)	1.2 lbs (0.54 kg)	-40°C to +70°C	27.9 lbs
MP9026CPRXFPT	8.8" x 8.1" x 1.6" (22.4 x 20.6 x 4.06 cm)	1.2 lbs (0.54 kg)	-40°C to +70°C	27.9 lbs
MP19013XFPT	8.8″ x 8.1″ x 1.6″ (22.4 x 20.6 x 4.06 cm)	1.2 lbs (0.54 kg)	-40°C to +70°C	27.9 lbs



MP8066PT



MPAB3 Mount



MPAB4 Mount

800/900 MHz Directional Panel Antennas with Printed Circuit Design

These 800/900 MHz directional panel antennas utilize a printed circuit design that provides 7.5 dBi gain in a small, low-profile package. Three models cover frequencies from 806 MHz to 960 MHz with a VSWR of less than 1.5:1 and no tuning required. Their sturdy UV stable radome withstands extreme environmental conditions, including exposure to UV radiation and extreme humidity.

Features

- PCB design utilized in three models that cover all 800/900 MHz frequencies with no tuning required. Provides best performance-to-price ratio with fewer sku requirements.
- Attractive, low profile housing. Blends well with indoor environments where aesthetic considerations are important.
- Adjustable mounting bracket for wall and corner mounting. Provides maximum installation flexibility.



Technical Data

Power Input: 50 watts
Polarization: Vertical, linear
Nominal Impedance: 50 ohms
VSWR: < 1.5:1
Radome Material: UV-stable, ASA - ABS
Back Plate Material: Weather resistant aluminum
Cable: 12" (30.5 cm) RG-58/U
Connector Options: (add connector part number after the PT prefix)
Example: MP8066PTBN (Model MP8066PT with BNC, male connector)
BNC, Male (part #BN) N, female (part #NF) N, male (part #NM) Female SMA (part #FSMA) Male SMA, part #MSMA) Female SMA, reverse threaded (part #FSMART) Male SMA, reverse threaded (part #MSMART) TNC, Male (part #C) Reverse Polarity TNC plug (part #MRPC) Mini-UHF, male (part #PL) Female FME (part #FFME)
Mounting Method: Adjustable wall/corner mount

Model	Frequency Range	Gain	3 dB Horizontal Beamwidth	3 dB Vertical Beamwidth	Front-to-Back Ratio
MP8066PT	806-866 MHz	8 dBi	90°	60°	15 dB
MP8068PT*	806-960 MHz	10 dBi	35°	65°	15 dB
MP8906PT	890-960 MHz	8 dBi	90°	60°	15 dB

Mechanical Specifications

Model	Dimensions	Weight (Mass)	Temperature Range	Wind Loading (Frontal) @ 100 mph Wind	Wind Survival
MP8066PT	8.6" W x 7.8" H x 2.2" D (21.8 x 19.8 x 5.7 cm)	1 lb (0.45 kg)	-40°C to +52°C	27.1 lbs (12.3 kg)	100 mph
MP8068PT*	16.4″ W x 9″ H x 2.7″ D (41.6 x 22.9 x 6.9 cm)	2 lbs (0.91 kg)	-40°C to +52°C	51.2 lbs (23.2 kg)	100 mph
MP8906PT	8.6" W x 7.8" H x 2.2" D (21.8 x 19.8 x 5.7 cm)	1 lb (0.45 kg)	-40°C to +52°C	27.1 lbs (12.3 kg)	100 mph

* Please specify connector option when ordering.

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS Yagi Base Station Antennas



MYP24015PTNF



MYP24010PTNF



MYK18

MYP Enclosed Yagi Antenna Series

The MYP 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.

Features

- Field adjustable to allow vertical or horizontal polarity. Eliminates co-channel interference from neighboring radiators. Polarity markings molded on the antenna ensure installation in the correct orientation.
- Optional, articulating mount. Allows precise adjustment of the antenna both vertically and horizontally.
- All antennas include a robust mast mount bracket designed to withstand 125 mph wind.
- 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.
- 30 dB front-to-back ratio permits less physical separation on the tower thus adding mounting flexibility at installation sites where space is limited.
- Attractive weather-proof radome constructed of UV resistant material. Provides robust and trouble-free use in harsh outdoor environments.

PCTEL

Technical Data

General Specifications: 2.4 GHz ISM enclosed yagi antenna series
Maximum Power: 5 watts
Polarization: Vertical or horizontal, linear (user adjustable)
Nominal Impedance: 50 ohms
VSWR : < 1.5:1
Termination: N, female is standard, NM optional
Mounting Method: Heavy duty yagi mounting bracket (included) permits mast mounting on masts up to 2" O.D. MYK18 adjustable wall/pipe mount allows 180° (included angle) azimuth and elevation adjustment (sold separately.) Stacking harnesses available to stack two yagis (sold separately.)

Model	Frequency Range	Nominal Gain	Horizontal Beamwidth @ 1/2 Power	Vertical Beamwidth @ 1/2 Power	Front-to- Back Ratio
MYP24010PTNF	2.4-2.485 GHz	10 dBi	55°	55°	23 dB
MYP24010PTRPC	2.4-2.485 GHz	10 dBi	55°	55°	23 dB
MYP24010PTRPNM	2.4-2.485 GHz	10 dBi	55°	55°	23 dB
MYP24014PTNF	2.4-2.485 GHz	14 dBi	30°	30°	30 dB
MYP24014PTRPNF	2.4-2.485 GHz	14 dBi	30°	30°	30 dB
MYP24014PTRPNM	2.4-2.485 GHz	14 dBi	30°	30°	30 dB
MYP24015PTNF	2.4-2.485 GHz	15 dBi	30°	30°	30 dB
MYP24015PTNM	2.4-2.485 GHz	15 dBi	30°	30°	30 dB

Model	Length	Weight (Mass)	Lateral Thrust at Rated Wind	Equivalent Flat Plate Area	Wind Survival	Cable
MYP24010PTNF	4.5″ L x 3″ OD (114 x 76 mm)	1 lb (0.5 kg)	5.8 lbs	0.060 ft ²	125 mph	3' (914.4 mm) coax
MYP24010PTRPC	4.5″ L x 3″ OD (114 x 76 mm)	1 lb (0.5 kg)	5.8 lbs	0.060 ft ²	125 mph	3' (914.4 mm) coax
MYP24010PTRPNM	4.5″ L x 3″ OD (114 x 76 mm)	1 lb (0.5 kg)	5.8 lbs	0.060 ft ²	125 mph	3' (914.4 mm) coax
MYP24014PTNF	14" x 3" OD (356 x 76 mm)	1 lb (0.5 kg)	18.3 lbs	0.20 ft ²	125 mph	36" (914 mm) coax
MYP24014PTRPNF	14" x 3" OD (356 x 76 mm)	1 lb (0.5 kg)	18.3 lbs	0.20 ft ²	125 mph	36" (914 mm) coax
MYP24014PTRPNM	14″ x 3″ OD (356 x 76 mm)	1 lb (0.5 kg)	18.3 lbs	0.20 ft ²	125 mph	36" (914 mm) coax
MYP24015PTNF	14" x 3" OD (356 x 76 mm)	1 lb (0.5 kg)	18.3 lbs	0.20 ft ²	125 mph	18" (457 mm) coax
MYP24015PTNM	14″ x 3″ OD (356 x 76 mm)	1 lb (0.5 kg)	18.3 lbs	0.20 ft ²	125 mph	18" (457 mm) coax

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS Yagi Base Station Antennas





Technical Data

Polarization: Vertical or horizontal, linear (user adjustable)
Nominal Impedance: 50 ohms
VSWR: < 1.5:1
Wind Survival: 125 mph
Cable: 18" coax
Termination: N female
Mounting Method: Heavy duty yagi mounting bracket (included) permits mast mounting on masts up to 2" O.D.

For detailed specifications, visit http://antenna.pctel.com.

WISP Enclosed Yagi Antenna

The yagi antenna can be used as bridge antenna between two networks or for point-to-point communications. It is field adjustable for vertical or horizontal polarization with matched principal plane beamwidths for optimum performance in either orientation. This design also provides improved frontto-back ratio and sidelobe suppression that reduces interference. The antenna features a robust mounting structure for consistent performance regardless of weather conditions.

Features

- Field adjustable to allow vertical or horizontal polarity. Eliminates cochannel interference from neighboring radiators. Polarity markings molded on the antenna ensure installation in the correct orientation.
- Includes a robust mast mount bracket designed to withstand 125 mph wind.
- 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.
- 30 dB front-to-back ratio permits less physical separation on the tower, adding mounting flexibility at installation sites where space is limited.
- Attractive weather-proof radome constructed of UV resistant material. Provides robust and trouble-free use in harsh outdoor environments.

Antenna Electrical Specifications

Model	Frequency Range	Gain	Horizontal Plane Beamwidth	Vertical Plane Beamwidth	Front-to- Back Ratio
WISP24015PTNF	2.4-2.48 GHz	15 dBi	30°	30°	30 dBi

Model	Dimensions	Weight (Mass)	Lateral Thrust at Rated Wind	Equivalent Flat Plate Area
WISP24015PTNF	14" x 3" OD	1 lbs	18.3 lbs	0.20 ft ²

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS Yagi Base Station Antennas

Aluminum Yagi Antennas

The MYA UHF 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. Select models are available in black finish. These antennas are UPS shippable.

Features

- Stainless steel hardware
- Available field tunable (add suffix "K") or factory tuned
- Field tunable (FT) version has telescoping elements with stainless steel lock clamps for easy adjustment
- Stacking harness available for phasing two or more antennas Black finish available on select models
- 3 element yagi boom available with 7/8" double wall (add suffix "HD")
- 6 element yagi boom is a 2 piece assembly
- Heavy-duty, double-walled aluminum boom
- · Black finish available on select models



Technical Data

Maximum Power:
300 watts (UHF series)
250 watts (VHF series)
500 watts (MYA1403 only)
1000 watts (lowband series)
Nominal Impedance: 50 ohms
Radiator Material: 3/8" solid 6061-T6 aluminum
ESD Protection: DC grounded
Wind Survival: 100 mph, 125 mph (MYA43012 only)
Termination: SO239 standard, N female is optional

For detailed specifications, visit http://antenna.pctel.com.



MYA2203KHDN



MYA1503K



MYK1



MYK2



MYK9

Model	Frequency Range	Factory Tuned Frequency	Gain	Bandwidth @ 1.5:1 VSWR	Horizontal Beamwidth @ 1/2 Power	Vertical Beamwidth @ 1/2 Power	Front-to-Back Ratio
MYA723K(N)	66-88 MHz	Specify	9.2 dBi	.7/1.7 MHz	72°	57°	15 dB
MYA1403K	130-150 MHz	ordering or	9.2 dBi	0.7 MHz	72°	57°	17 dB
MYA1403N*	132-150 MHz	add suffix "K" for field or	9.2 dBi	0.7 MHz	72°	57°	17 dB
MYA1503K(N)	150-174 MHz	factory tuned	9.2 dBi	0.7 MHz	72°	57°	17 dB
MYA1505K(N)	150-174 MHz	Add suffix "FT"	11.3 dBi	1.3 MHz	56°	48°	20 dB
MYA1506N	150-174 MHz	for telescopic	12.3 dBi	1.5 MHz	42°	40°	20 dB
MYA2203KHDN	220-250 MHz	elements option	9.2 dBi	3.0 MHz	72°	57°	17 dB
MYA4063	406-420 MHz	413 MHz	9.2 dBi	15 MHz	72°	57°	17 dB
MYA4065N	406-420 MHz	413 MHz	11.3 dBi	15 MHz	56°	48°	20 dB
MYA4205N	420-440 MHz	430 MHz	11.3 dBi	20 MHz	56°	48°	20 dB
MYA4303	430-450 MHz	440 MHz	9.2 dBi	20 MHz	72°	57°	17 dB
MYA45012(N)	450-470 MHz	460 MHz	14.3 dBi	20 MHz	36°	34°	25 dB
MYA4503(N)	450-470 MHz	460 MHz	9.2 dBi	20 MHz	72°	57°	17 dB
MYA4505(N)	450-470 MHz	460 MHz	11.3 dBi	20 MHz	56°	48°	20 dB
MYA4506(N)	450-470 MHz	460 MHz	12.3 dBi	20 MHz	42°	40°	20 dB
MYA4706	470-490 MHz	480 MHz	12.3 dBi	20 MHz	42°	40°	20 dB
MYA7106	710-746 MHz	728 MHz	11.1 dBi	36 MHz	55°	45°	15 dB
MYA80612	806-866 MHz	813 MHz	13.1 dBi	60 MHz	36°	34°	20 dB
MYA8063	806-866 MHz	813 MHz	8.1 dBi	60 MHz	72°	57°	15 dB
MYA8066	806-866 MHz	813 MHz	11.1 dBi	60 MHz	42°	40°	16 dB
MYA82512	824-896 MHz	835 MHz	13.1 dBi	73 MHz	36°	34°	20 dB
MYA8253	824-896 MHz	835 MHz	8.1 dBi	73 MHz	72°	57°	15 dB
MYA8256	824-896 MHz	835 MHz	11.1 dBi	73 MHz	42°	40°	16 dB
MYA91512	896-940 MHz	915 MHz	13.1 dBi	45 MHz	40°	42°	20 dB
MYA9153	896-940 MHz	915 MHz	8.1 dBi	75 MHz	72°	57°	15 dB
MYA9156	896-940 MHz	915 MHz	11.1 dBi	45 MHz	48°	56°	20 dB
MYA93012	896-970 MHz	930 MHz	13.1 dBi	75 MHz	40°	42°	20 dB
MYA9303	896-970 MHz	930 MHz	8.1 dBi	50 MHz	72°	57°	15 dB
MYA9306	896-970 MHz	930 MHz	11.1 dBi	75 MHz	48°	56°	20 dB
MYA9309	896-970 MHz	930 MHz	12.1 dBi	75 MHz	52°	43°	20 dB

* Must specify frequency when ordering; add \$3.00 for "N" connector. Suffix "N" indicates "N" connector. Add suffix "K" for field or factory tuned option. Add suffix "FT" for telescopic elements option.

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS Yagi Base Station Antennas

Mechanical Specifications

Model	Weight (Mass)	Elements	Bending Moment at Rated Wind	Lateral Thrust @ Rated Wind	Equivalent Flat Plate Area	Boom Length	Boom Diameter
MYA723K(N)	7 Ibs	3	155 ft-lbs	48.9 lbs	1.26 sq ft	92″	1-1/2" (double walled)
MYA1403K	3 lbs	3	25.3 ft-lbs	14.5 lbs	.36 sq ft	42″	7/8″
MYA1403N*	3 lbs	3	25.3 ft-lbs	14.5 lbs	.36 sq ft	42″	7/8″
MYA1503K(N)	3 Ibs	3	25.3 ft-lbs	14.5 lbs	.36 sq ft	42″	7/8″
MYA1505K(N)	4 Ibs	5	82.7 ft-lbs	27.6 lbs	.71 sq ft	72″	1-1/4″
MYA1506N*	5 lbs	6	160.6 ft-lbs	37.1 lbs	.96 sq ft	104″	1-1/4″
MYA2203KHDN	3 lbs	3	16 ft-lbs	9.1 lbs	.21 ft ²	42″	7/8″
MYA4063	1.5 lbs	3	5.9 ft-lbs	6.1 lbs	.15 ft ²	23″	7/8″
MYA4065N	2.0 lbs	5	12.6 ft-lbs	9.3 lbs	.23 ft ²	35.5″	7/8″
MYA4205(N)	2.0 lbs	5	12.6 ft-lbs	9.3 lbs	.23 ft ²	35.5″	7/8″
MYA4303	1.5 lbs	3	5.9 ft-lbs	6.1 lbs	.15 ft ²	23″	7/8″
MYA45012(N)	5.0 lbs	12	74.6 ft-lbs	24.9 lbs	.62 ft ²	72″	1-1/4″
MYA4503(N)	1.5 lbs	3	5.9 ft-lbs	6.1 lbs	.15 ft ²	23″	7/8″
MYA4505(N)	2.0 lbs	5	12.6 ft-lbs	9.3 lbs	.23 ft ²	35.5″	7/8″
MYA4506(N)	2.5 lbs	6	21.4 ft-lbs	12.2 lbs	.29 ft ²	42″	7/8″
MYA4706	2.5 Inb	6	21.4 ft-lbs	12.2 lbs	.29 ft ²	42″	7/8″
MYA7106	2 lbs	6	12.5 ft-lbs	10.7 lbs	.17 sq ft	28″	7/8″
MYA80612	2.5 lbs	12	17.8 ft-lbs	20.8 lbf	.27 ft ²	48″	7/8″
MYA8063	1.5 lbs	3	4.6 ft-lbs	6.5 lbs	.10 sq ft	17″	7/8″
MYA8066	2 lbs	6	12.5 ft-lbs	10.7 lbs	.17 sq ft	28″	7/8″
MYA82512	2.5 lbs	12	17.8 ft-lbs	.29 sq ft	.29 sq ft	48″	7/8″
MYA8253	1.5 lbs	3	4.6 ft-lbs	6.5 lbs	.10 sq ft	17″	7/8″
MYA8256	2 lbs	6	12.5 ft-lbs	10.7 lbs	.17 sq ft	28″	7/8″
MYA91512	2.5 lbs	12	23.3 ft-lbs	16.6 lbs	.27 sq ft	48″	7/8″
MYA9153	1.5 lbs	3	4.2 ft-lbs	5.9 lbs	.09 sq ft	17″	7/8″
MYA9156	1.5 lbs	6	10.6 ft-lbs	9.1 lbs	.16 sq ft	23″	7/8″
MYA93012	2.5 lbs	12	23.3 ft-lbs	16.6 lbs	.27 sq ft	48″	7/8″
MYA9303	1.5 lbs	3	4.2 ft-lbs	5.9 lbs	.09 sq ft	17″	7/8″
MYA9306	1.5 lbs	6	10.6 ft-lbs	9.1 lbs	.16 sq ft	23″	7/8″
MYA9309	1.5 lbs	9	12.7 ft-lb	10.3 lbs	.18 sq ft	23″	7/8″

* Must specify frequency when ordering; add \$3.00 for "N" connector. Suffix "N" indicates "N" connector. Add suffix "K" for field or factory tuned option. Add suffix "FT" for telescopic elements option.

Mounting

Yagi Series	Mounting Method	Maximum Mount Pipe Diameter
UHF	MYK1 standard mast mount included with all models, except 12 element yagis MYK2 standard mast mount included with 12 element models	Up to 2" with factory supplied mounts
VHF	MYK1 mast mounting bracket included with 3 element yagis MYK2 mast mounting bracket included with 5 and 6 element yagis	1-5/8" for 3 element yagis with factory supplied mount 2" for 5 and 6 element yagis with factory supplied mount Other mount options available
Lowband	MYK9 mast mounting bracket (included)	2.5" with factory supplied mount Other mount options available
900 MHz	MKY10 or MYK1 mast mounting bracket (included) See Mechanical Specifications	1-5/8″
800 MHz	MKY10 or MYK1 mast mount (included) See Mechanical Specifications	2.5" (All other 800 MHz models)

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS

Yagi Base Station Antennas

Black Optimized Yagi Antennas

The BMOY yagis have been optimized using a genetic algorithm to achieve superior performance over the entire 800/900 MHz and UHF frequency bands. These antennas feature solid 3/8" elements attached to a seamless aluminum boom with 360° welds, and are finished with a black polyester powder coating. Each antenna has a type N termination located at the end of the boom, with a fully sealed driven element for complete protection against humidity, acid rain, or salt spray. A solid aluminum mounting bracket allows for either vertical or horizontal polarization. The BMOY's sturdy construction and advanced engineering design provides outstanding durability and superior performance in all weather conditions.

Features

- Broadband performance covering all 800/900 MHz frequencies and no tuning required. Provides optimal performance, minimizes inventory requirements, and reduces installation time.
- 360° welds at element and boom interface provide complete protection of the antenna's internal mechanism against moisture.
- Solid aluminum mounting clamps with stainless steel hardware. Ensures a
 robust installation and allows the antenna to be mounted for horizontal or
 vertical polarization.
- End-fed type N connector. Makes connector accessible for easier installations and protects the electrical connection from moisture and other extreme weather influences.
- Fully enclosed low loss feed system. No exposed gamma match to corrode or deteriorate.
- Black polyester powder-coated finish. Provides an added layer of protection, maximizing performance and durability under the toughest weather conditions.
- No tuning required. Allows faster, more reliable installations (UHF models).



Technical Data

Maximum Power: 150 watts
Nominal Impedance: 50 ohms
Radiator Material: 3/8" solid 6061-T6 aluminum
ESD Protection: DC grounded
Wind Survival: 200 mph with no ice. It will survive up to 110 mph with 0.5" radial ice build-up.
Termination: N female
Maximum Mounting Pipe Diameter: 1.9" OD (with MYK17 factory supplied mount) 2.68" OD (with MYK14 optional heavy duty mount)
Mounting Method: MYK17 mast mount bracket (included) MYK14 heavy duty mast mount is also available



The BMOY UHF models are available in 3 element and 5 element versions. Each version includes models covering 406-440 MHz, 430-460 MHz, and 440-480 MHz. The line also includes a 5 element model covering 470-512 MHz.



BMOY8905



BMOY8903



End fed connector facilitates installation



360° welded elements and black powder coating provide maximum durability

Model	Frequency Range	Gain	Bandwidth @ 1.5:1 VSWR	Horizontal Beamwidth @ 1/2 Power	Vertical Beamwidth @ 1/2 Power	Front-to-Back Ratio
BMOY4065	406-440 MHz	9.0 dBd	34 MHz	52°	45°	> 15 dB
BMOY4063	406-440 MHz	6.5 dBd	34 MHz	71°	62°	> 15 dB
BMOY4405	440-480 MHz	9.0 dBd	40 MHz	52°	45°	> 15 dB
BMOY4403	440-480 MHz	6.5 dBd	40 MHz	71°	62°	> 15 dB
BMOY4705	470-512 MHz	9.0 dBd	42 MHz	52°	45°	> 15 dB
BMOY8065	806-869 MHz	9.0 dBd	60 MHz	52°	45°	15 dB
BMOY8905	890-960 MHz	9.0 dBd	70 MHz	52°	45°	15 dB
BMOY8903	890-960 MHz	6.4 dBd	70 MHz	100°	54°	20 dB

Model	Weight (Mass)	Elements	Bending Moment @ 125 mph Wind	Lateral Thrust @ 125 mph Wind	Equivalent Flat Plate Area	Boom Length	Boom Diameter
BMOY4065	2 lbs	5	32.4 ft-lbs	24.2 lbs	.31 ft ²	34″	.75″
BMOY4063	1.2 lbs	3	12.7 ft-lbs	14.8 lbs	.19 ft ²	22″	.75″
BMOY4405	2 lbs	5	32.4 ft-lbs	24.2 lbs	.31 ft ²	34″	.75″
BMOY4403	1.2 lbs	3	12.7 ft-lbs	14.8 lbs	.19 ft ²	22″	.75″
BMOY4705	2 lbs	5	32.4 ft-lbs	24.2 lbs	.31 ft ²	34″	.75″
BMOY8065	0.9 lbs	5	9.5 ft-lbs	12.6 lbs	.16 ft ²	20.5″	.75″
BMOY8905	0.9 lbs	5	9.5 ft-lbs	12.6 lbs	.16 ft ²	20.5″	.75″
BMOY8903	0.7 lbs	3	3.9 ft-lbs	7.9 lbs	.10 ft ²	14″	.75″

NON CELLULAR DIRECTIONAL BASE STATION ANTENNAS Broadband Corner Reflector Antennas

MCR Broadband Corner Reflector Antennas Series

With a higher front-to-back ratio (unwanted signal rejection) the MCR806 delivers superior performance in areas of concentrated RF signals.

Features

- 8.5 dB forward gain to aim signal in desired direction.
- Covers the entire band without tuning.
- RG-213/U cable with male connector.
- Rugged construction.

Antenna Electrical Specifications

Model	Frequency Range	Factory Tuned Frequency	Gain	Bandwidth @ 1.5:1 VSWR	Horizontal Beamwidth @ 1/2 Power	Vertical Beamwidth @ 1/2 Power	Front-to-Back Ratio
MCR806	806-960 MHz	835 MHz	8.5 dB	90 MHz	45°	56°	23 dB

Mechanical Specifications

Model	Dimensions	Weight (Mass)	Equivalent Flat Plate Area	Lateral Thrust @ Rated Wind	Bending Moment at Rated Wind
MCR806	14″ H x 14″ W (355.6 x 355.6 mm)	3.8 lbs (1.7 kg)	1.92 ft ²	71 lbs	41.4 ft-lbs



MCR806



Technical Data

Maximum Power: 100 watts
Nominal Impedance: 50 ohms
Construction Material: 6061-T6 aluminum panels
ESD Protection: DC grounded
Wind Survival: 100 mph
Termination: 24" jumper with N male connector
Mounting Hardware: 1-1/4" U bolts (supplied)
Maximum Mount Pipe Diameter: 1-1/4"