

- Two foot (0.7 m), WideBand, four port antenna with a 33° azimuth beamwidth covering 3100-4200 MHz frequencies
- Four wide high band ports covering 3100-4200 MHz, with full spectrum compliance
- Narrow enclosure with 9.4" (238 mm) width, reducing tower loading issues
- The Low weight and Low profile of this 33° panel antenna, makes this an ideal solution for Fixed Wireless Access and Small Cell/C-RAN Densification deployments
- LTE Optimized FBR and SPR performance, providing for an efficient use of valuable radio capacity
- LTE Optimized Boresight and Sector XPD and USL performance, essential for LTE Performance
- Equipped with 4.3-10 connectors

Overview

The CCI WideBand Antenna is a four port antenna, with four wide High Band ports covering 3100-4200 MHz. The CCI WideBand Antenna provides the capability to deploy 4x4 Multiple-Input Multiple-Output (MIMO). The CCI WideBand antenna has 4° of Fixed EDT across all four ports.

CCI antennas are designed and produced to ISO 9001:2008 certification standards for reliability and quality in our state-of-the-art manufacturing facilities.

Applications

- Ideal for Sectorization in FWA deployments or other deployments where 4x4 MIMO is required in 3.5 GHz spectrum
- Ready for Network Standardization on 4.3-10 connectors
- With CCI's WideBand Antennas, wireless providers can connect platforms to a single antenna, reducing tower load, lease expense, deployment time and installation costs



SPECIFICATIONS

Quad Port High-Band Antenna

QPA33F-H2A

Electrical

Ports	4 x High Band Ports for 3100-4200 MHz		
Frequency Range	3100-3300 MHz	3300-3800 MHz	3700-4200 MHz
Gain	18.5 dBi	19.0 dBi	18.9 dBi
Azimuth Beamwidth (-3dB)	41°	41°	39°
Elevation Beamwidth (-3dB)	7.7°	6.8°	6.4°
Electrical Downtilt	4°	4°	4°
Elevation Sidelobes (1st Upper)	<-18 dB	<-20 dB	<-20 dB
Front-to-Back Ratio @180°	> 40 dB	> 40 dB	> 40 dB
Cross-Polar Discrimination at Peak	> 18 dB	> 15 dB	> 16 dB
Cross-Polar Port-to-Port Isolation	> 25 dB	> 25 dB	> 25 dB
Voltage Standing Wave Ratio (VSWR)	< 1.5:1	< 1.5:1	< 1.5:1
Passive Intermodulation (2x20W)	≤ -140 dBc	≤ -140 dBc	≤ -140 dBc
Input Power Continuous Wave (CW)	100 watts	100 watts	100 watts
Polarization	Dual Linear 45°	Dual Linear 45°	Dual Linear 45°
Input Impedance	50 ohms	50 ohms	50 ohms
Lightning Protection	DC Ground	DC Ground	DC Ground

BASTA Electrical Specifications*			
Frequency Range	3100-3300 MHz	3300-3800 MHz	3700-4200 MHz
Gain (dBi)	18.1	18.5	18.1
Gain over all Tilts Tolerance (dB)	0.3	0.3	0.9
Azimuth Beamwidth Tolerance (°)	3.1	2.9	5.0
Elevation Beamwidth Tolerance (°)	0.3	0.5	0.4
Electrical Downtilt Deviation (°)	0.7	0.5	0.5
First Upper Sidelobes Suppression (dB)	14.5	17.4	14.9
Upper Sidelobe Suppression Peak to 20° (dB)	14.3	14.8	15.0
Front-to-Back Ratio over ±20° (dB)	27.3	28.5	27.8
Cross-polar Discrimination at 3 dB (dB)	13.5	13.6	13.4

* Electrical specifications follow document "Recommendation on Base Station Antenna Standards" (BASTA) V11.1. All specifications are subject to change without notice.

Mechanical

Dimensions (LxWxD)	28.6x9.4x4.0 in (727x238x102 mm)
Survival Wind Speed	> 150 mph (> 241 kph)
Front Wind Load	58 lbs (260 N) @ 100 mph (161 kph)
Side Wind Load	29 lbs (128 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	2.3 ft ² (0.2 m ²)
Weight *	11.9 lbs (5.4 kg)
Connector	4 x 4.3-10 female
Mounting Pole	2 to 5 in (5 to 12 cm)

* Weight excludes mounting



SPECIFICATIONS

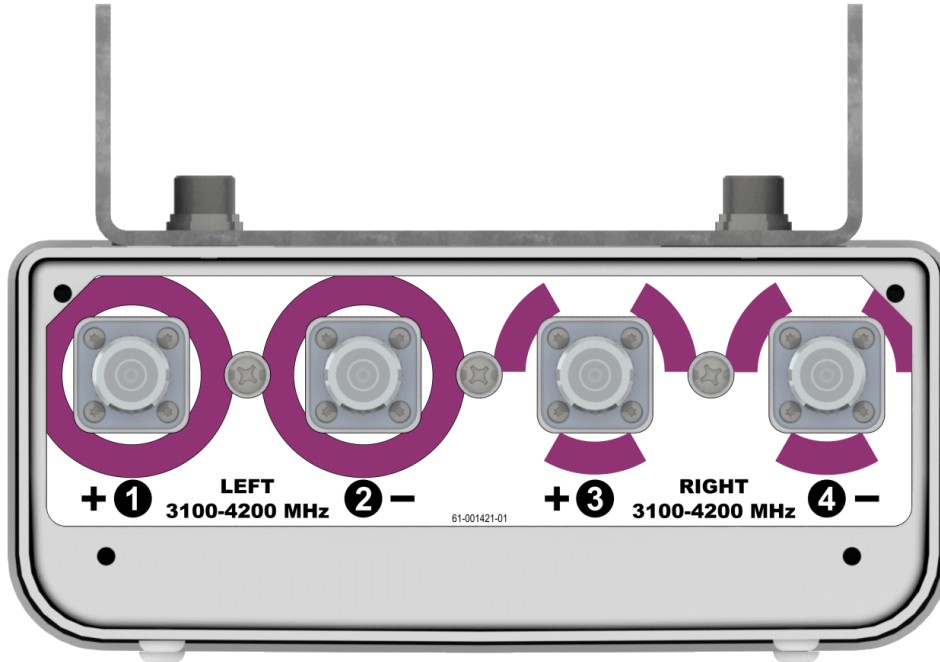
Quad Port High-Band Antenna

QPA33F-H2A

Mechanical

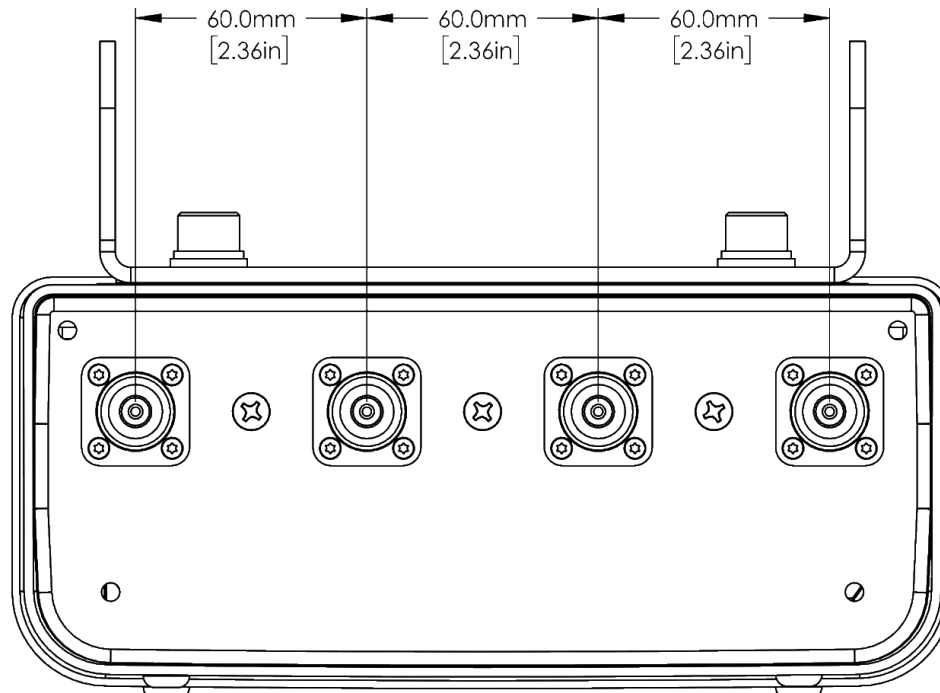
Bottom View

QPA33F-H2A



Connector Spacing Diagram

QPA33F-H2A



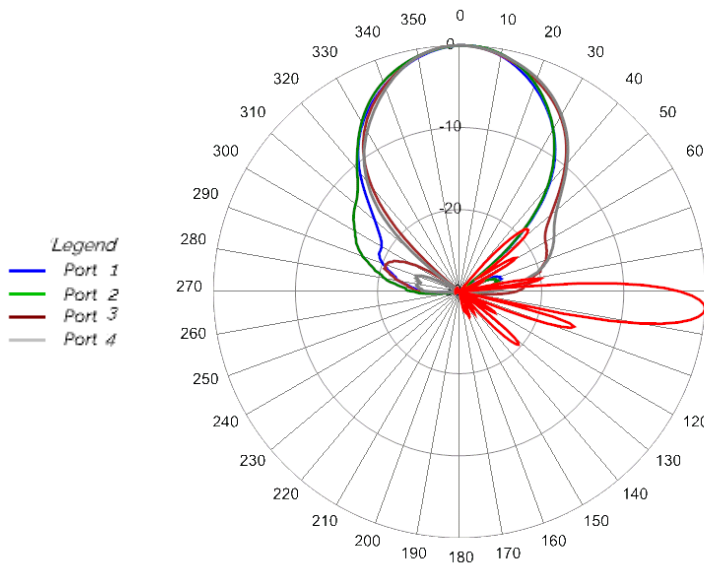


Quad Port High-Band Antenna

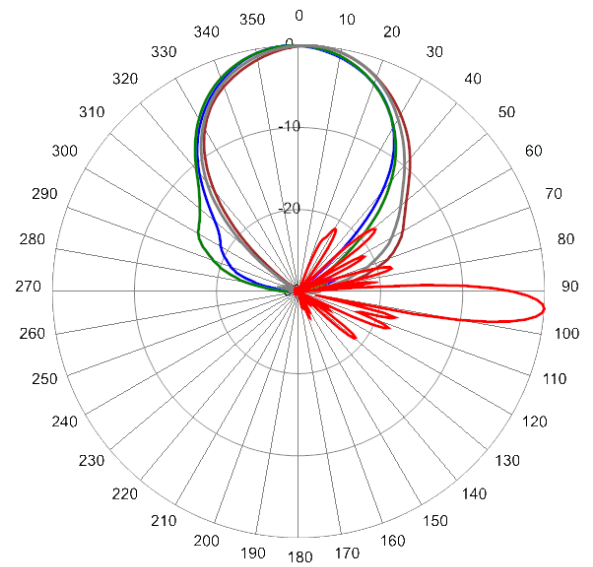
QPA33F-H2A

Typical Antenna Patterns

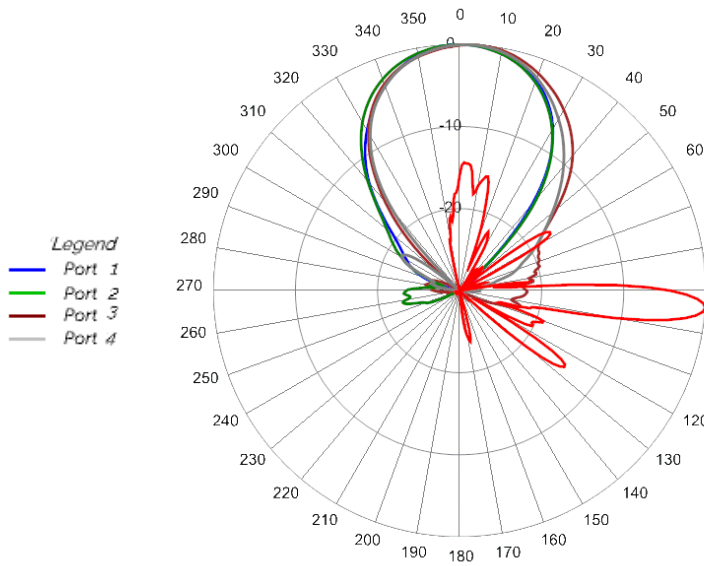
For detailed information on additional antenna patterns, contact customer support at support@cciproducts.com



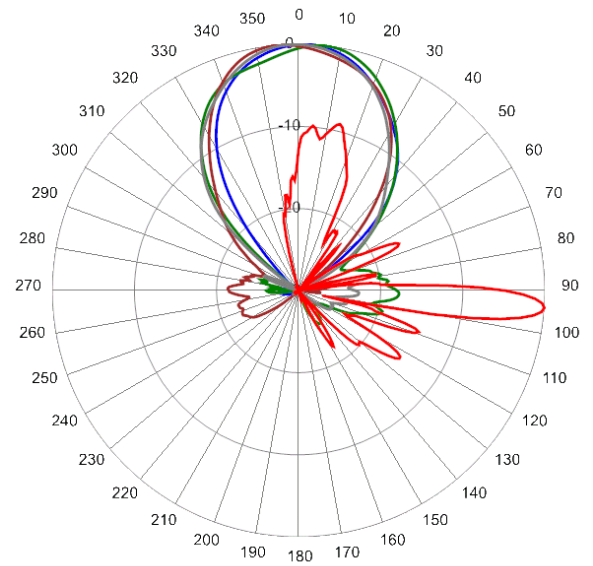
3200 MHz Azimuth with Elevation 4°



3400 MHz Azimuth with Elevation 4°



3800 MHz Azimuth with Elevation 4°



4000 MHz Azimuth with Elevation 4°



ORDERING

Quad Port High-Band Antenna

QPA33F-H2A

Parts & Accessories

- | | |
|----------------------|--|
| QPA33F-H2AA-K | Two foot (0.7 m) antenna with 33° azimuth beamwidth, with 4° Fixed EDT, 4.3-10 female connectors and MBK-03 mounting bracket |
| MBK-03 | Mounting bracket kit (top and bottom) with 0° to 10° mechanical tilt adjustment |

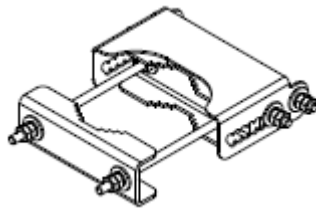


Mounting Bracket Kit

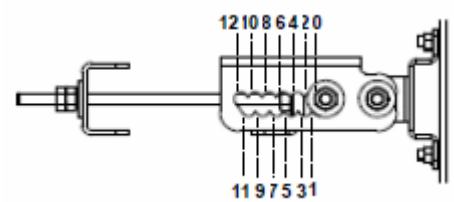
MBK-03

Mechanical

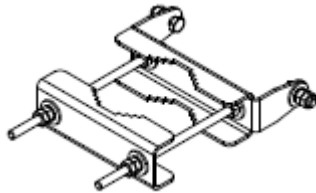
Weight	9.8 lbs (4.4 kg)
Hinge Pitch	13 in (330 mm)
Mounting Pole Dimension	2 to 5 in (5 to 12 cm)
Fastener Size	M10
Installation Torque	15 ft-lbs (20 Nm)
Mechanical Tilt Adjustment	0° - 12°



MBK-03 Top Adjustable Bracket



MBK-03 Top Adjustable Bracket Side View



MBK-03 Bottom Fixed Bracket



STANDARDS & CERTIFICATIONS

Quad Port High-Band Antenna

QPA33F-H2A

Standards & Compliance

Environmental IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-5, IEC 60068-2-6, IEC-60068-2-11, IEC 60068-2-14, IEC 60068-2-18, IEC 60068-2-27, IEC 60068-2-29, IEC 60068-02-30, IEC 60068-2-52, IEC 60068-2-64, GR-63-CORE 4.3.1, EN 60529, IP 24

Certifications

Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US, ISO 9001

