

- High Band Ports include WCS Band
- Four High Band ports with two Low Band ports in one antenna
- Sharp elevation beam
- Excellent elevation side-lobe performance
- Excellent MIMO performance due to array spacing
- Excellent PIM Performance
- A multi-network solution in one radome
- Reduces tower loading
- Frees up space for tower mounted E-nodes
- Single radome with six ports

Overview

The CCI Hexport Multi-Band Antenna Array has four high band ports and two low band ports, our hexport antenna is ready for 4X4 high band MIMO. Modern networks demand high performance, consequently CCI has incorporated several new and innovative design techniques to provide an antenna with excellent side-lobe performance, sharp elevation beams, and high front to back ratio.

Multiple networks can now be connected to a single antenna, reducing tower loading and leasing expense, while decreasing deployment time and installation cost.

Full band capability for SMR800 and PCS 1900 MHz coverage in a single enclosure.

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

Applications

- 4x4 MIMO for the high band and 2x2 MIMO for the low band
- Adding additional capacity without adding additional antennas
- Adding WCS Band without increasing antenna count



HexPort Dual-Band Antenna

HPA-65F-BUU-H2

SPECIFICATIONS

Electrical

Ports	2 x Low Band Ports which cover the full range from 698-894 MHz		4 x High Band Ports which cover the full range from 1710-2360 MHz			
Frequency Range	698-806 MHz	824-894 MHz	1850-1990 MHz	1710-1780/2110-2180 MHz	2305-2360 MHz	
Gain	10.0 dBi	10.5 dBi	12.8 dBi	12.6 dBi	13.6 dBi	14.0 dBi
Azimuth Beamwidth (-3dB)	65°	62°	64°	66°	60°	59°
Elevation Beamwidth (-3dB)	40.0°	35.8°	17.5°	17.8°	15.8°	14.3°
Electrical Downtilt	4°	4°	3°	3°	3°	3°
Elevation Sidelobes (1st Upper)	< -15 dB	< -13 dB	< -13 dB	< -17 dB	< -13 dB	< -17 dB
Front-to-Back Ratio @180°	> 28 dB	> 28 dB	> 30 dB	> 30 dB	> 30 dB	> 30 dB
Cross-Polar Port-to-Port Isolation	> 20 dB	> 20 dB	> 23 dB	> 23 dB	> 23 dB	> 23 dB
Voltage Standing Wave Ratio (VSWR)	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Passive Intermodulation (2x20W)	≤ -150 dBc	≤ -150 dBc	≤ -150 dBc	≤ -150 dBc	≤ -150 dBc	≤ -150 dBc
Input Power Continuous Wave (CW)	500 watts	500 watts	300 watts	300 watts	300 watts	300 watts
Polarization	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°
Input Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground

Mechanical

Dimensions (LxWxD)	21.4x14.4x7.3 in (544x366x185 mm)
Survival Wind Speed	> 150 mph (> 241 kph)
Front Wind Load	66 lbs (293 N) @ 100 mph (161 kph)
Side Wind Load	34 lbs (150 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	2.6 ft ² (0.2 m ²)
Weight *	15.2 lbs (6.9 kg)
Connector	6 x 7-16 DIN female long neck
Mounting Pole	2 to 5 in (5 to 12 cm)

* Weight excludes mounting



SPECIFICATIONS

HexPort Dual-Band Antenna

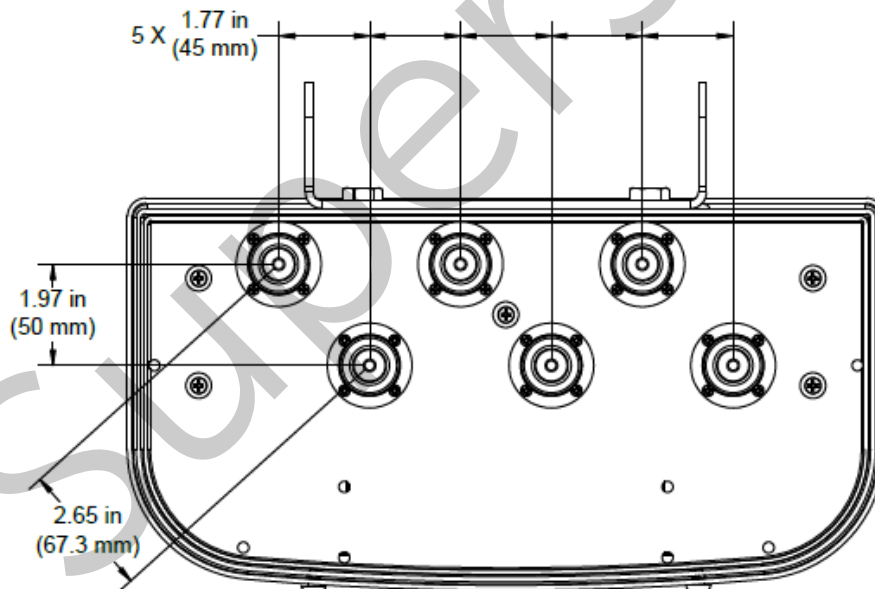
HPA-65F-BUU-H2

Mechanical

Bottom View



Connector Spacing





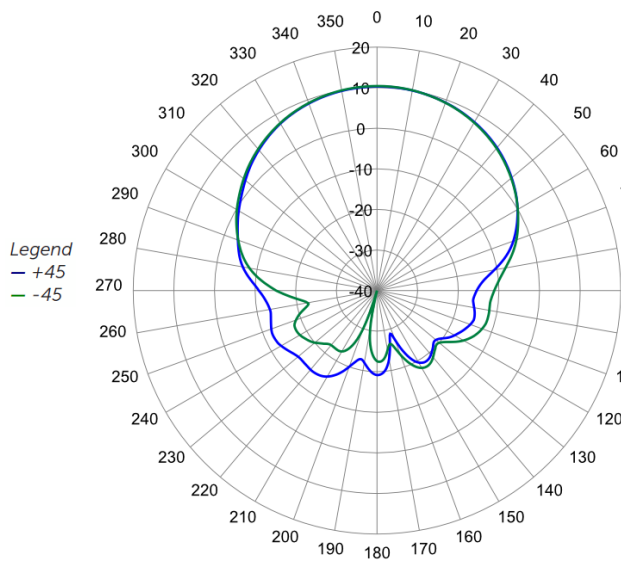
HexPort Dual-Band Antenna

HPA-65F-BUJ-H2

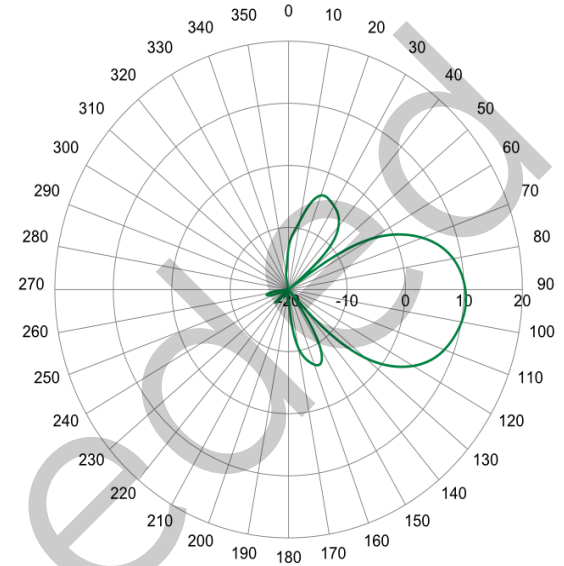
SPECIFICATIONS

Typical Antenna Patterns

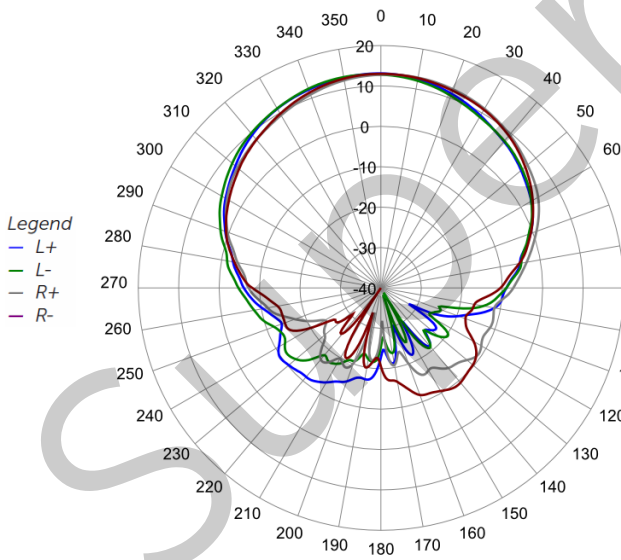
For detailed information on additional antenna patterns, contact customer support at support@cciproducts.com



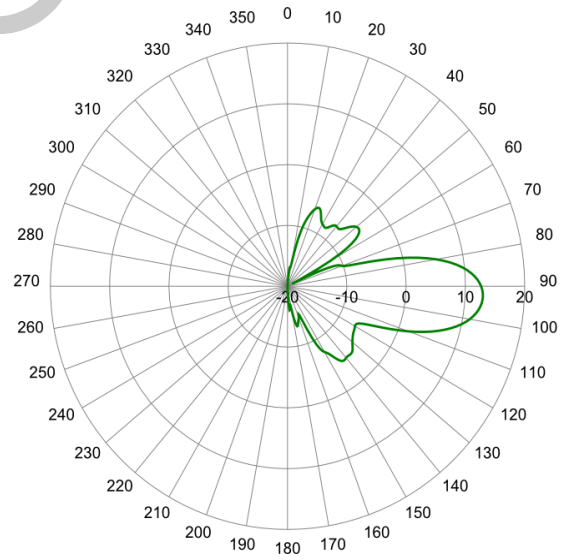
824 MHz Azimuth



824 MHz Elevation 4°



1948 MHz Azimuth



1948 MHz Elevation 3°



ORDERING

HexPort Dual-Band Antenna

HPA-65F-BUU-H2

Parts & Accessories

HPA-65F-BUU-H2	Two foot (0.5 m) HexPort antenna with 65° azimuth beamwidth and fixed electrical tilt
HPA-65F-BUU-H2-K	Antenna kit with MBK-03 mounting bracket
MBK-03	Mounting bracket kit (top and bottom) with 0° to 12° mechanical tilt adjustment

Superseded

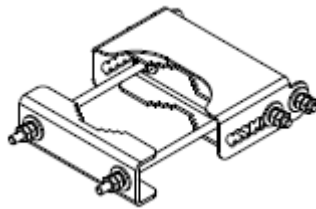


Mounting Bracket Kit

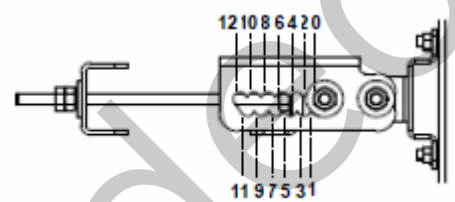
MBK-03

Mechanical

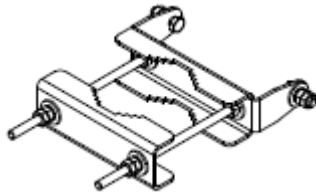
Weight	9.8 lbs (4.4 kg)
Hinge Pitch	13 in (330 mm)
Mounting Pole Dimension	2 to 5 in (5 to 12 cm)
Fastener Size	M10
Installation Torque	15 ft-lbs (20 N·m)
Mechanical Tilt Adjustment	0° - 12°



MBK-03 Top Adjustable Bracket



MBK-03 Top Adjustable Bracket Side View



MBK-03 Bottom Fixed Bracket



STANDARDS & CERTIFICATIONS

HexPort Dual-Band Antenna

HPA-65F-BUU-H2

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, ISO 9001



Superseded