

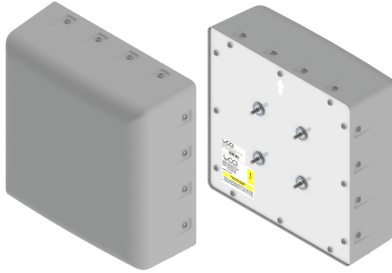


Antennas

DATA SHEET

DualBand Small Cell Panel Antenna

SCA65F-EJ1A



- One foot (0.3 m), Dualband, eight port antenna with a 65° azimuth beamwidth and 40° elevation beamwidth, covering 1695-2690 MHz and 5150-5925 MHz frequencies
- Four Ultra-wideband ports covering 1695-2690 MHz and two pairs of two U-NII band ports covering 5150-5925 MHz, all within in a low weight and low profile 1'x1' panel antenna
- Full Spectrum Compliance for 1695-2690 MHz and U-NII frequencies
- Antenna meets U-NII pattern and gain requirements per FCC/ECC regulations
- The Low weight and Low profile of this panel antenna makes this an ideal solution for Small Cell/C-RAN Densification deployments in difficult jurisdictional urban, suburban and rural environments
- Ordering options for multiple mounting brackets, including simple wall mounting or Dual-Axis adjustment bracket. Which makes it ideal for mounting on utility, lighting and traffic poles
- Antenna has Fixed EDT of 4° for the 1695-2690 MHz ports and 5° for EDT U-NII 5150-5925 MHz ports
- Exceeds minimum PIM performance requirements
- Equipped with 4.3-10 connectors, which is 40% smaller than 7/16 DIN connectors

Overview

The CCI Dualband 65° x 40° array is an Eight port Small Cell antenna, with four Ultra-wideband ports covering 1695-2690 MHz and two pairs of two U-NII band ports covering 5150-5925 MHz. The CCI 65° x 40° Small Cell antenna provides 4x4 Multiple-input-Multiple-output (MIMO) functionality across the 1695-2690 MHz ports and provides Dual 2x2 Multiple-input-Multiple-output (MIMO) functionality across the 5150-5925 MHz ports.

The CCI 65° x 40° Small Cell antenna is an ideal solution for Small Cell/C-RAN/o-DAS Densification deployments in difficult jurisdictional urban, suburban and rural where antenna size and count are restricted.

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

Applications

- Small Cell/C-RAN/o-DAS in Urban, Suburban and other visually sensitive environments
- Ideal for Macro to Small Cell Coverage Transition Zones
- Outdoor Distributed Antenna Systems (oDAS), neutral host in venues, campuses and other outdoor coverage applications



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SPECIFICATIONS

DualBand Small Cell Panel Antenna

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Electrical

Ports	4 x High Band Ports for 1695-2690 MHz					4 x High Band Ports for 5150-5925 MHz
Frequency Range	1695-1880 MHz	1850-1990 MHz	1920-2180 MHz	2300-2400 MHz	2496-2690 MHz	5150-5925 MHz
Gain ¹	10.7 dBi	10.7 dBi	10.9 dBi	11.0 dBi	11.2 dBi	5.8 dBi
Gain (Average) ²	9.8 dBi	10.2 dBi	10.4 dBi	10.6 dBi	10.8 dBi	5.2 dBi
Azimuth Beamwidth (-3dB)	70°	68°	66°	68°	71°	72°
Elevation Beamwidth (-3dB)	47°	45°	44°	38°	34°	26°
Electrical Downtilt	4°	4°	4°	4°	4°	5°
Elevation Sidelobes (1st Upper)	< -24 dB	< -21 dB	< -19 dB	< -14 dB	< -11 dB	< -19 dB
Front-to-Back Ratio @180°	> 35 dB	> 35 dB	> 35 dB	> 35 dB	> 35 dB	> 35 dB
Cross-Polar Discrimination (at Peak)	> 19 dB	> 19 dB	> 21 dB	> 22 dB	> 19 dB	> 22 dB
Cross-Polar Port-to-Port Isolation	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 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)	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	≤ -153 dBc	NA
Input Power Continuous Wave (CW)	100 watts	100 watts	100 watts	100 watts	100 watts	10 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

¹Peak gain across sub-bands.

²Electrical specifications follow document "Recommendation on Base Station Antenna Standards" (BASTA) V9.6.

Mechanical

Dimensions (LxWxD)	11.7x11.9x4.8 in (298x302x123 mm)
Survival Wind Speed	> 150 mph (> 241 kph)
Front Wind Load	30 lbs (132 N) @ 100 mph (161 kph)
Side Wind Load	12 lbs (54 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	1.2 ft ² (0.1 m ²)
Weight *	5.3 lbs (2.4 kg)
Connector	8 x 4.3-10 female
Mounting Pole	2 to 5 in (5 to 12 cm)

* Weight excludes mounting



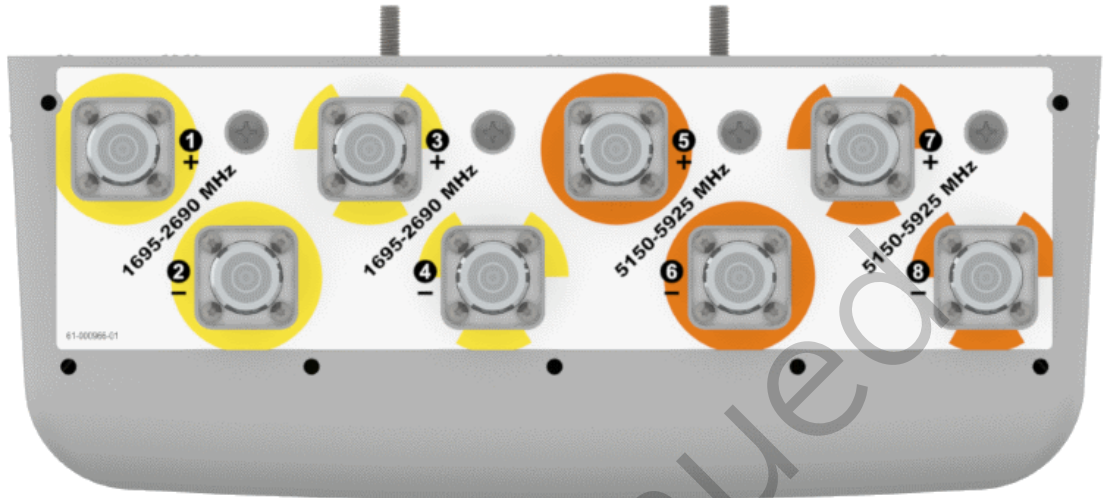
Antennas

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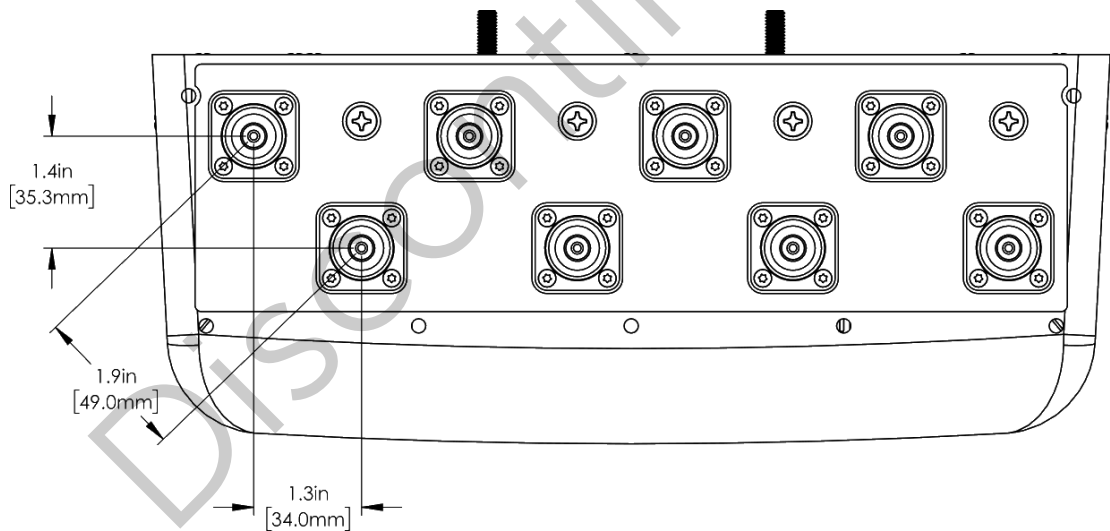
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Bottom View



Connector Spacing





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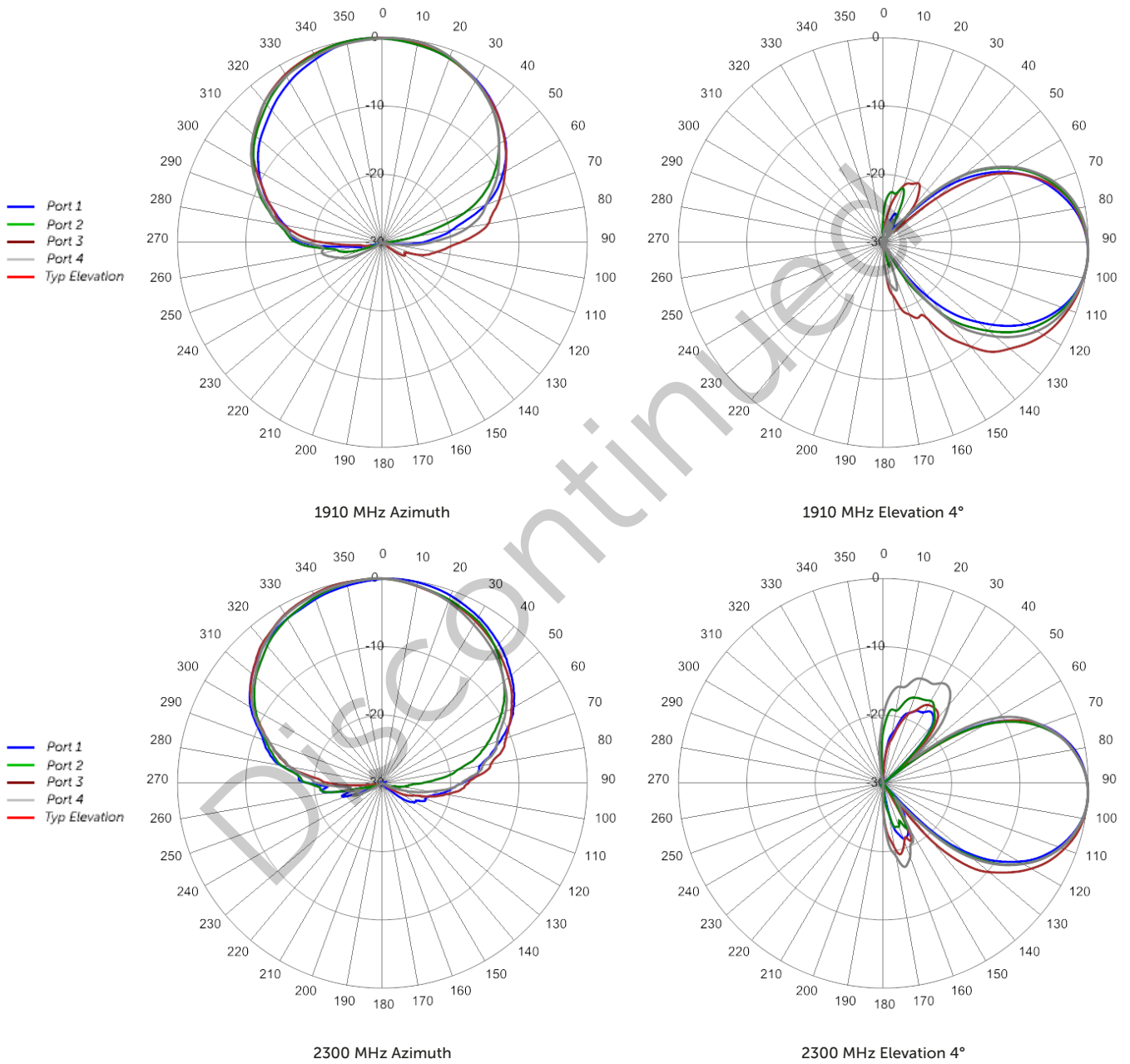
SPECIFICATIONS

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Typical Antenna Patterns

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





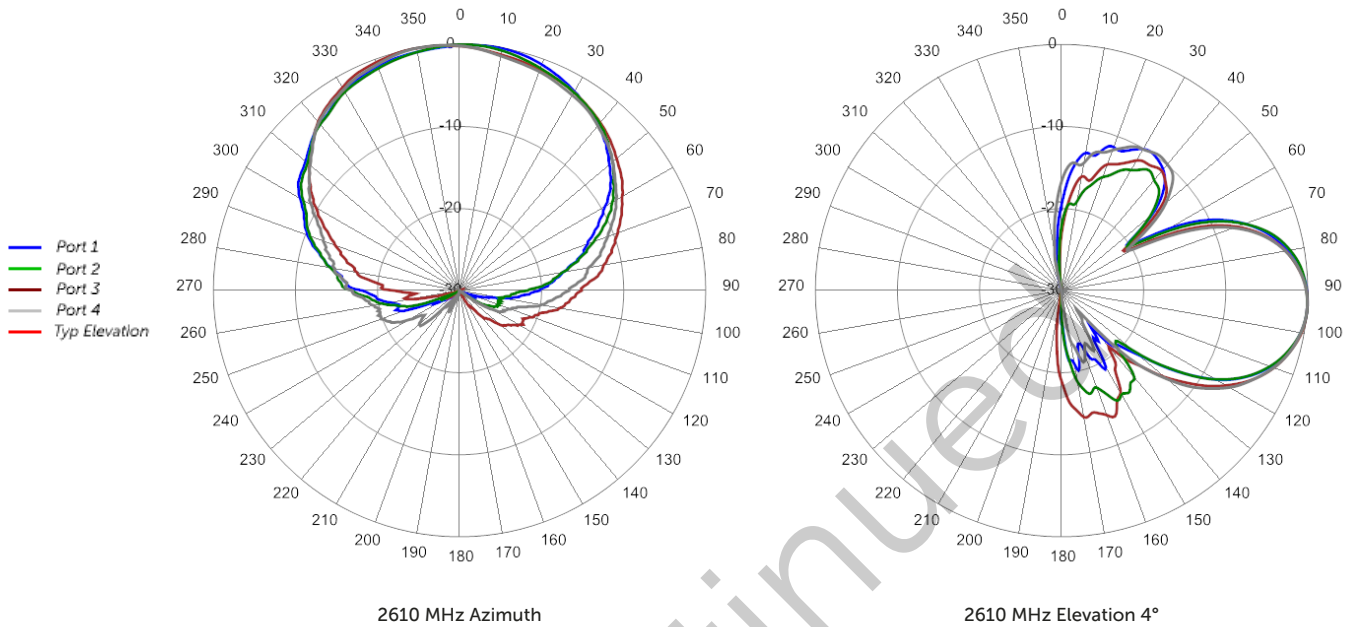
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Typical Antenna Patterns





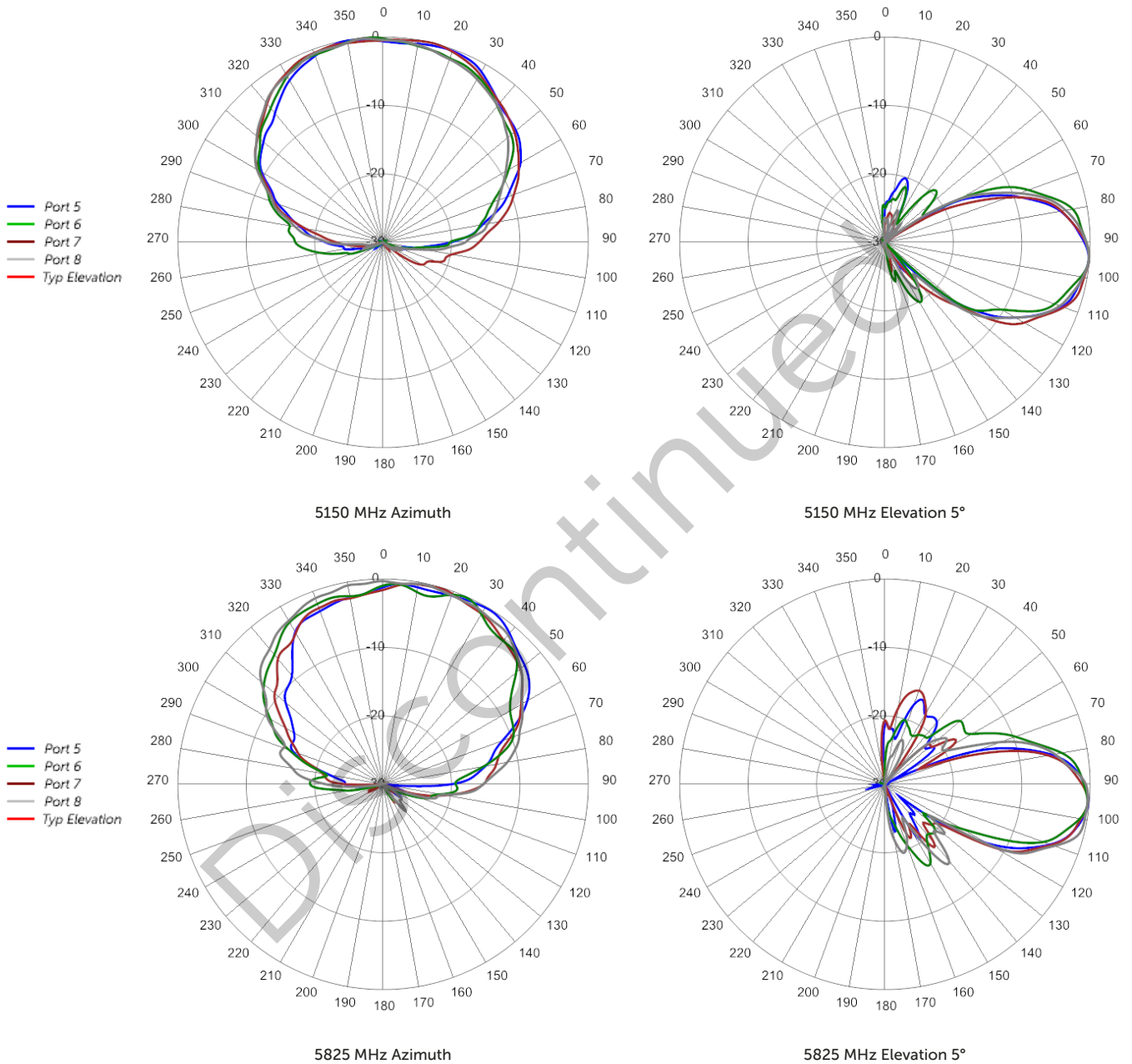
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SPECIFICATIONS

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Typical Antenna Patterns



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ORDERING

DualBand Small Cell Panel Antenna

SCA65F-EJ1A

Parts & Accessories

SCA65F-EJ1AA-K	1 foot (0.3 m) DualBand Panel antenna with 65° azimuth beamwidth MBK-14 mounting bracket
SCA65F-EJ1AA-K1	1 foot (0.3 m) DualBand Panel antenna with 65° azimuth beamwidth MBK-14 mounting bracket and MBC-07 pole mount clamp
SCA65F-EJ1AA-K2	1 foot (0.3 m) DualBand Panel antenna with 65° azimuth beamwidth MBK-17 non tilt fixed wall mount
MBK-14	Adjustable wall mount kit or pole mount using steel banding (not supplied)
MBC-07	2-4.5 inch OD (5-11 cm) Pole mount clamp for use with MBK-08
MBK-17	Fixed wall mount kit

Discontinued



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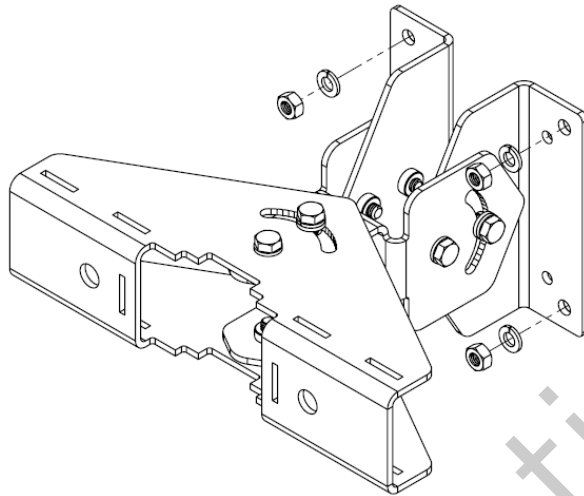
ACCESSORIES

Mounting Bracket Kit

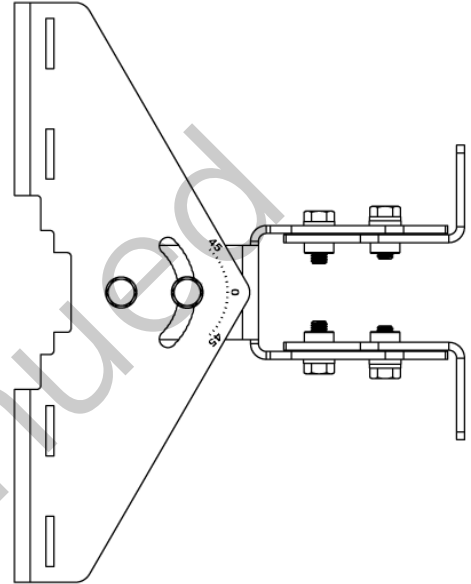
MBK-14

Mechanical

Weight 3.3 lbs (1.5 kg)



MBK-14 Adjustable Brackets



MBK-14 Adjustable Brackets Top View

Discontinued



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ACCESSORIES

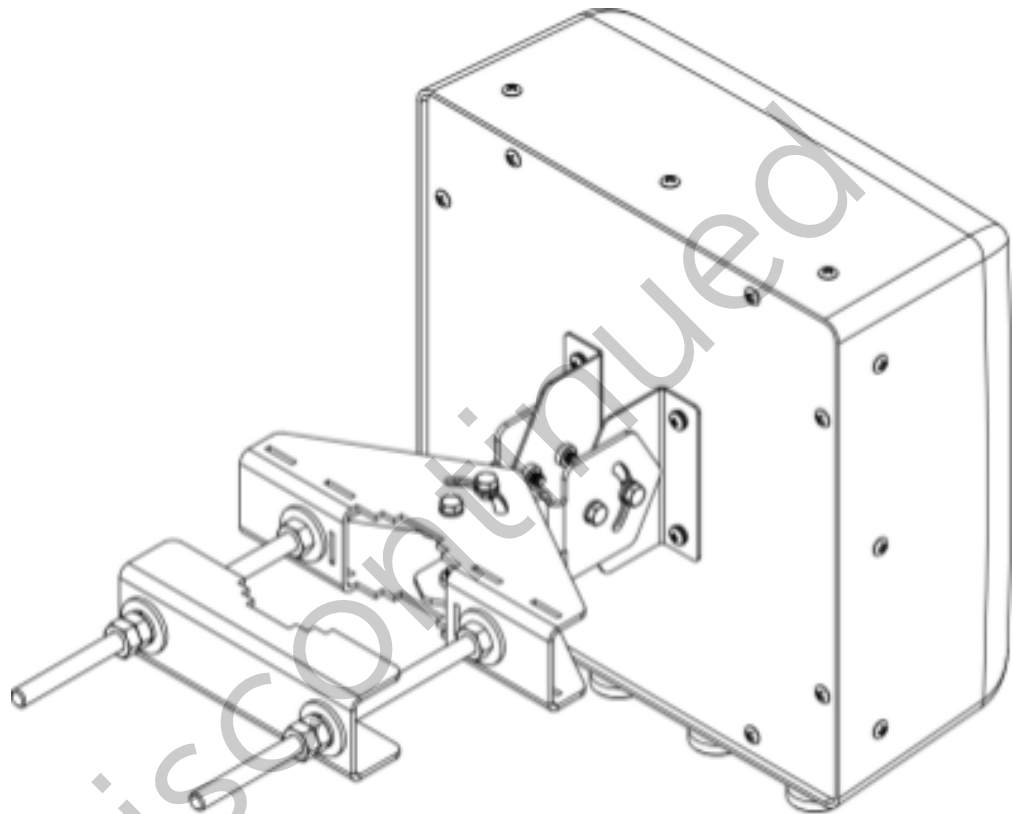
Mounting Bracket Clamp

MBC-07

Mechanical

Weight 1.8 lbs (0.8 kg)

Mounting Pole Dimension 2 - 4.5" (5 - 11 cm).



MBC-07 mounted to MBK-08



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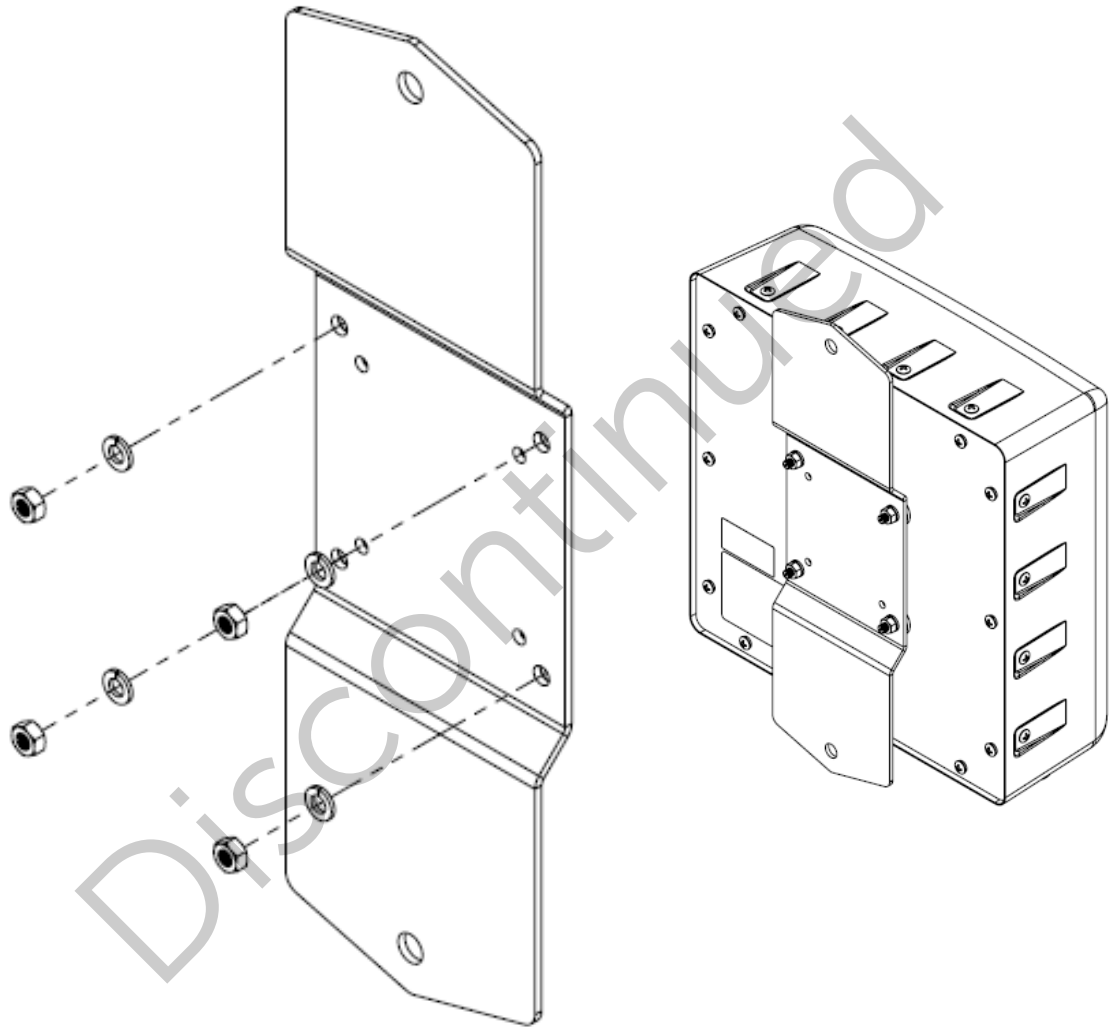
ACCESSORIES

Mounting Bracket Kit

MBK-17

Mechanical

Weight 2.0 lbs (0.9 kg)



MBK-17

MBK-17 Installed to SCA65F-EJ1A



Antennas

STANDARDS & CERTIFICATIONS

DualBand Small Cell Panel Antenna

SCA65F-EJ1A

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



Discontinued



CCI

Communication Components Inc.

EXTENDING WIRELESS PERFORMANCE