



Antennas

DATA SHEET

Wide Band Quasi-Omni Antenna

SCA360V-U2A



- Two foot (0.6 m), Singleband, four port 4T4R (4x4 MIMO) quasi-omni antenna with 360° of coverage, covering 1695-2400 MHz frequencies, with Dual VET control
- Four wide band ports covering 1695-2400 MHz, all within in a low weight and low profile cylindrical antenna
- Full Spectrum Compliance for 1695-2400 MHz, AWS3 and WCS
- With a 24" height and 8.5" diameter, this low profile cylindrical antenna is an ideal solution for Small Cell/C-RAN Densification deployments in difficult jurisdictional urban, suburban and rural environments
- The antenna is equipped with Dual VET control, with a tilt range of 4°-16°. The Dual VET control can provide independent tilt for each paired ports
- The antenna is equipped with removable center mount plate, which can be used for third party concealment applications or utilize a removeable 1.375 in (35 mm) OD center post, which makes it ideal for mounting on utility, lighting and traffic poles
- Exceeds minimum PIM performance requirements
- Equipped with 4.3-10 connectors, which is 40% smaller than 7/16 DIN connectors

Overview

The CCI Singleband Quasi-Omni array is a four port antenna Small Cell antenna, with four wide band ports covering 1695-2400 MHz. The CCI Singleband Quasi-Omni Small Cell antenna provides 4x4 Multiple-input-Multiple-output (MIMO) functionality across the 1695-2400 ports. The CCI Singleband Quasi-Omni Small Cell antenna is equipped with Dual VET control, with a tilt range of 4°-16°, capable of providing independent tilt per pair ports, providing flexibility for network coverage needs.

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

Applications

- Microcells, Small Cells and C-RAN in Urban, Suburban and other visually sensitive environments
- Outdoor Distributed Antenna Systems (ODAS), neutral host in venues, campuses and other outdoor coverage applications



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SPECIFICATIONS

Wide Band Quasi-Omni Antenna

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Electrical

| Ports | 4 x High Band Ports for 1695-2400 MHz | | | |
|------------------------------------|---------------------------------------|---------------|---------------|---------------|
| Frequency Range | 1695-1880 MHz | 1850-1990 MHz | 1920-2180 MHz | 2300-2400 MHz |
| Gain ¹ | 10.3 dBi | 10.3 dBi | 10.5 dBi | 10.2 dBi |
| Gain (Average) ² | 9.1 dBi | 9.5 dBi | 9.7 dBi | 9.6 dBi |
| Elevation Beamwidth (-3dB) | 14.8° | 13.7° | 13.0° | 11.7° |
| Electrical Downtilt | 4° to 16° | 4° to 16° | 4° to 16° | 4° to 16° |
| Elevation Sidelobes (1st Upper) | < -16 dB | < -16 dB | < -16 dB | < -18 dB |
| Cross-Polar Port-to-Port Isolation | > 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 |
| Passive Intermodulation (2x20W) | ≤ -150 dBc | ≤ -150 dBc | ≤ -150 dBc | ≤ -150 dBc |
| Input Power Continuous Wave (CW) | 300 watts | 300 watts | 300 watts | 300 watts |
| Polarization | Dual Pol 45° | Dual Pol 45° | Dual Pol 45° | Dual Pol 45° |
| Input Impedance | 50 ohms | 50 ohms | 50 ohms | 50 ohms |
| Lightning Protection | 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 (LxD) | 24x8.5 in (617x216 mm) |
| Diameter max at top cap | 8.8 in (224 mm) |
| Survival Wind Speed | > 150 mph (> 241 kph) |
| Wind Load | 26 lbs (116 N) @ 100 mph (161 kph) |
| Equivalent Flat Plate Area | 1.0 ft ² (0.1 m ²) |
| Weight * | 13.2 lbs (6.0 kg) |
| Connector | 4 x 4.3-10 female |
| Mounting Pole | 1.0 to 2.5 in (2.5 to 6.3 cm) |

* Weight excludes mounting kit



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Bottom View





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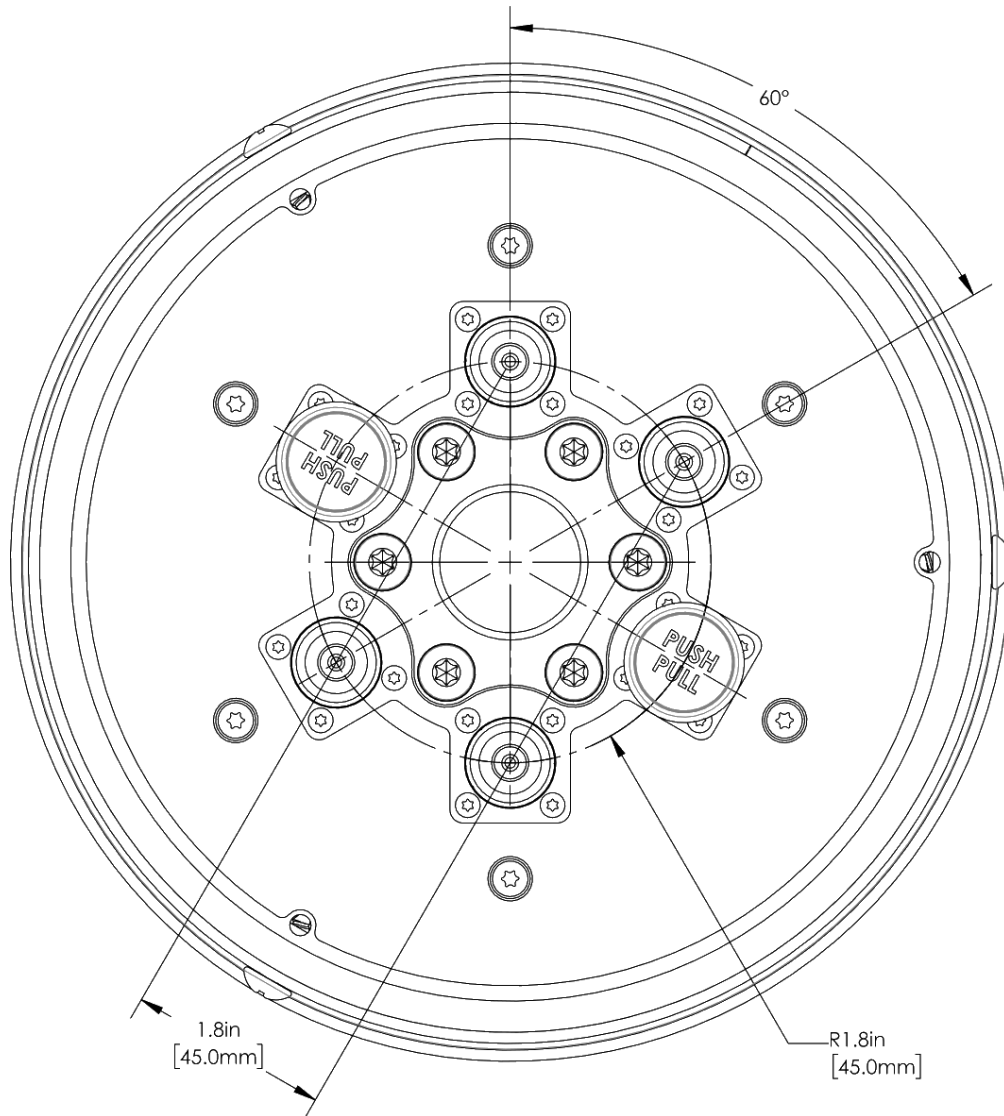
SPECIFICATIONS

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Mechanical

Connector Spacing





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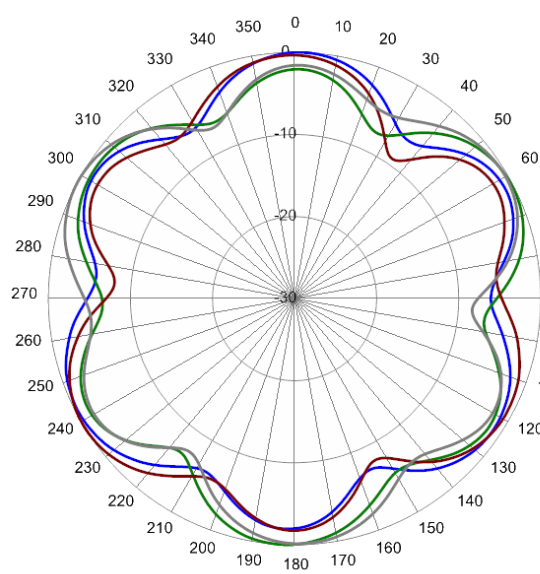
SPECIFICATIONS

Wide Band Quasi-Omni Antenna

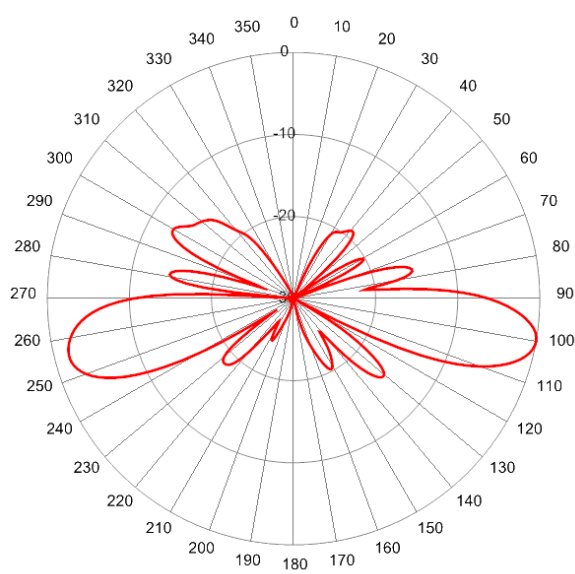
SCA360V-U2A

Typical Antenna Patterns

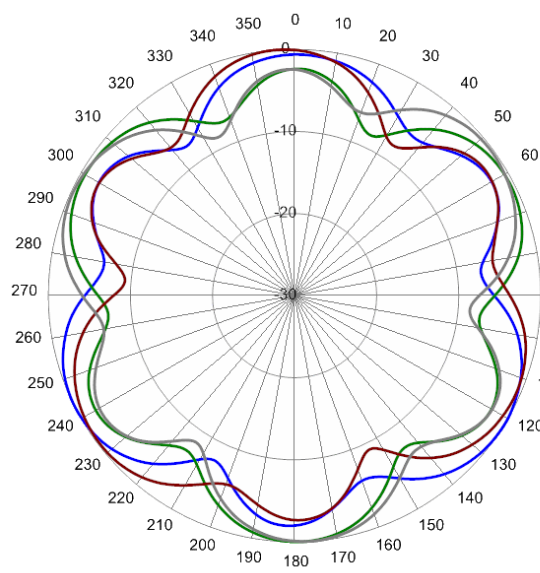
For detailed information on additional antenna patterns, contact customer support at support@cciprducts.com



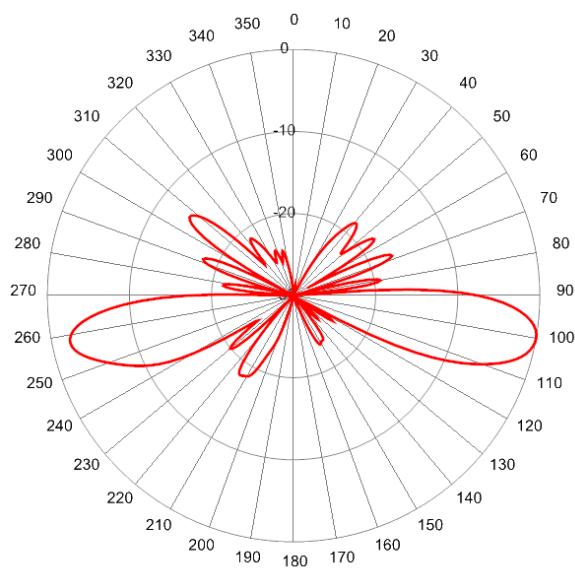
1720 MHz Azimuth



1720 MHz Elevation 10°



1920 MHz Azimuth



1920 MHz Elevation 10°

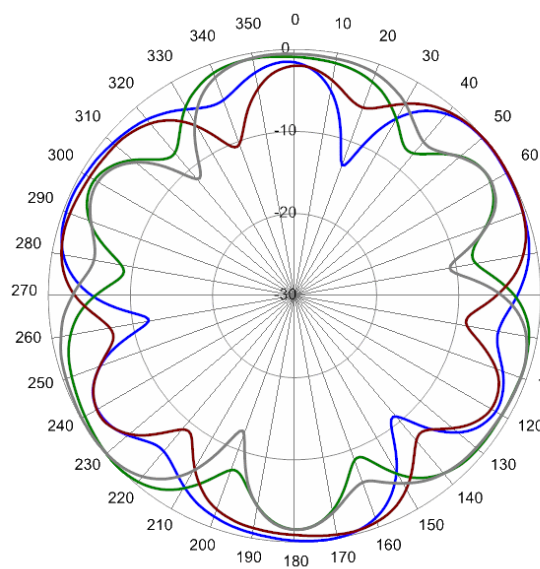


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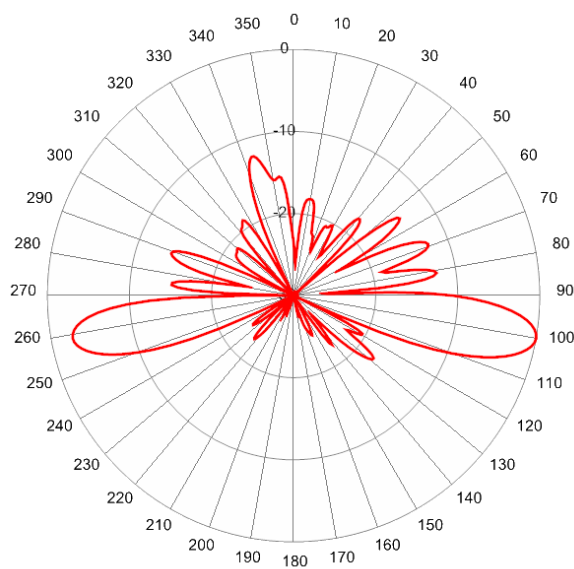
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2350 MHz Azimuth



2350 MHz Elevation 10°



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ORDERING

Wide Band Quasi-Omni Antenna

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Parts & Accessories

SCA360V-U2AA-K Two foot (0.6 m) Wideband Omni antenna with 4.3-10 connectors, two factory install manual VET actuators and MBC-02 mounting kit

SCA360V-U2AA-K1 Two foot (0.6 m) Wideband Omni antenna with 4.3-10 connectors, two factory install manual VET actuators and MBC-05 clamp kit (suitable for pole top mounting)

MBC-02 Clamp kit, Pipe range 1-2.5 in (2.5-6.3 cm) or lag bolt to wooden pole or flat surface. (lag bolts not supplied)

MBC-05 Pole top mounting kit suitable for 4" (10 cm) and larger wood, steel or concrete utility or lighting poles.



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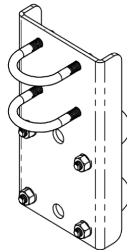
ACCESSORIES

Triple Mount Mast Bracket

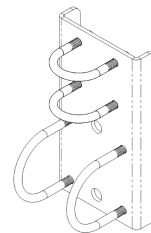
MBC-02

Mechanical

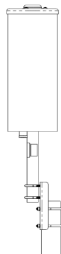
| | |
|------------------------------|---------------------------------|
| Dimensions (L x W x D) | 7.9×4.3×1.1 in. (200×108×28 mm) |
| Weight | 2.4 lbs (1.1 kg) |
| Fastener Size | 5/16 UNC |
| Installation Torque (ft-lbs) | 10 |



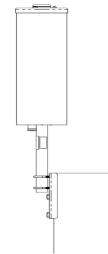
Bracket Vert. Mount View



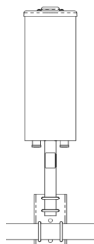
Bracket Hort. Mount View



Vertical Pole Mount



Wooden Pole Mount



Horizontal Pole Mount



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ACCESSORIES

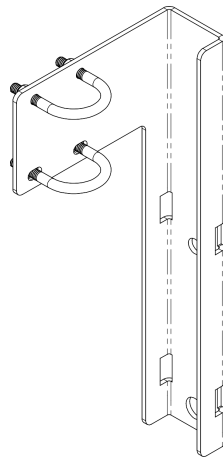
Mounting Bracket Kit

MBC-05

Mechanical

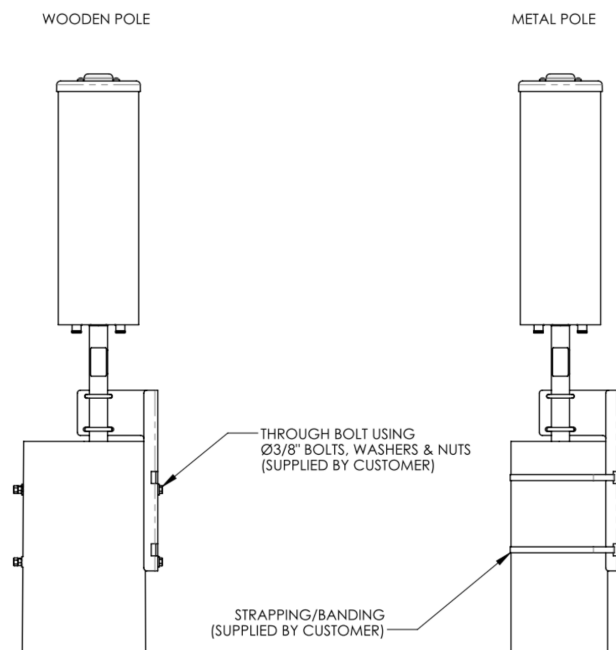
Weight 4.1 lbs (1.8 kg)

Mounting Pole Dimension 4 in (10 cm) and greater



MBC-05

Suggested Mounting Options



MBC-05 Typical mount



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STANDARDS & CERTIFICATIONS

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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



CCI Communication Components Inc.
EXTENDING WIRELESS PERFORMANCE