



# Antennas

DATA SHEET

## Multi-Band Quasi-Omni Antenna

SCA360F-BU2D



- Two foot (0.6 m), multiband, four port quasi-omni antenna with 360° of coverage, covering 698-896 MHz and 1710-2360 MHz frequencies
- Two wide high band ports covering 1710-2360 MHz and two wide low band ports covering 698-896 MHz in a low profile cylindrical antenna
- Full Spectrum Compliance 698-896 MHz / 1710-2360 MHz
- Low profile cylindrical antenna makes this an ideal solution for Small Cell densification deployments in urban and suburban environments
- Antenna is equipped with center mount post, with a flanged mount. Which makes it ideal for mounting on utility, lighting and traffic poles
- Exceeds minimum PIM performance requirements
- Ordering options for 7/16 DIN connector or the new 4.3-10 connector, which is 40% smaller than traditional 7/16 DIN connectors

### Overview

The CCI multiband quasi-omni array is a four port Small Cell antenna, with two wide high band ports covering 1710-2360 MHz and two wide low band ports covering 698-896 MHz. The CCI Quasi-Omni Small Cell antenna provides 2x2 Multiple-input-Multiple-output (MIMO) across the high band and low band ports. The CCI Quasi-Omni Small Cell antenna is an ideal choice for Microcells, Small Cell and oDAS densification deployments in urban and suburban environments where antenna size and count are restricted. The CCI Quasi-Omni Small Cell antenna provides a fixed 2° EDT, across both low and high band frequencies.

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 and Small Cells 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

#### Electrical

Ports	2 x Ports which cover the full range from 698-896 MHz		2 x Ports which cover the full range from 1710-2360 MHz			
Frequency Range	698-806 MHz	824-896 MHz	1850-1990 MHz	1710-1780/2110-2180 MHz	2305-2360 MHz	
Gain	4.6 dBi	5.4 dBi	8.8 dBi	8.4 dBi	9.5 dBi	10.4 dBi
Elevation Beamwidth (-3dB)	31°	32°	17°	18°	14°	13°
Electrical Downtilt	2°	2°	2°	2°	2°	2°
First upper sidelobes at peak gain	< -12 dB	< -11 dB	< -16 dB	< -16 dB	< -18 dB	< -18 dB
Cross-Polar Port-to-Port Isolation	> 20 dB	> 20 dB	> 25 dB	> 25 dB	> 23 dB	> 25 dB
Interband Port-to-Port Isolation	> 35 dB	> 35 dB	> 35 dB	> 35 dB	> 35 dB	> 35 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)	300 watts	300 watts	200 watts	200 watts	200 watts	200 watts
Polarization	Dual Linear 45°	Dual Linear 45°	Dual Linear 45°	Dual Linear 45°	Dual Linear 45°	Dual Linear 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 (LxD)	24.0 x 11.5 in (609 x 292 mm)
Survival Wind Speed	> 150 mph (> 241 kph)
Front Wind Load	34 lbs (153 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	1.3 ft <sup>2</sup> (0.1 m <sup>2</sup> )
Weight *	14.3 lbs (6.5 kg)
Connector (RF)	4 x 7-16 DIN long female or 4 x 4.3-10 female
Mounting Hole	26 mm

\* Weight excludes mounting



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## SPECIFICATIONS

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#### Mechanical

Bottom View





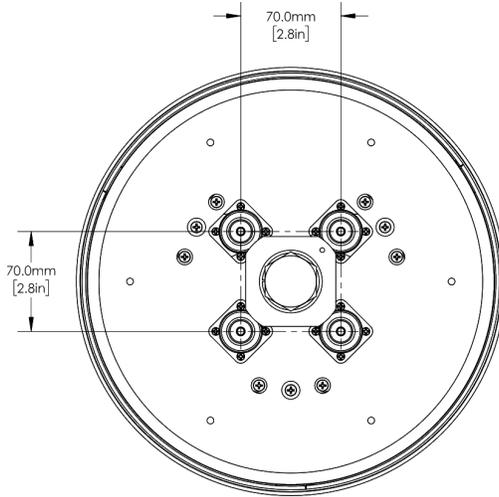
# Antennas

## SPECIFICATIONS

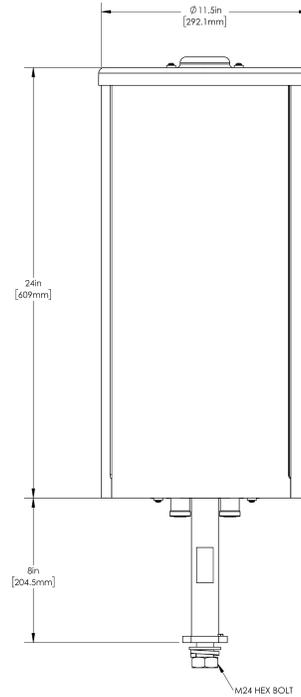
### Multi-Band Quasi-Omni Antenna

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Connector Spacing

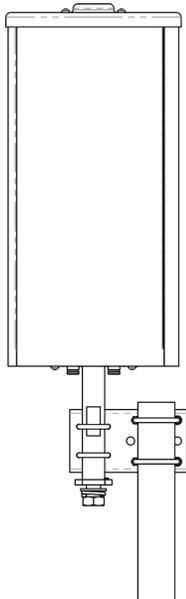


Side View

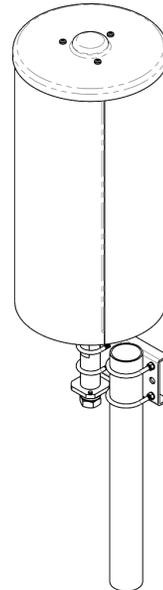


MBC-02

Optional Installation Method using MBC-02



Optional Installation Method using MBC-02





# Antennas

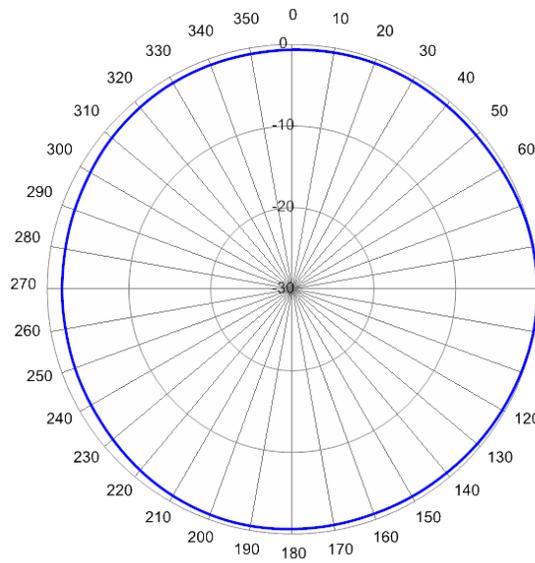
## SPECIFICATIONS

### Multi-Band Quasi-Omni Antenna

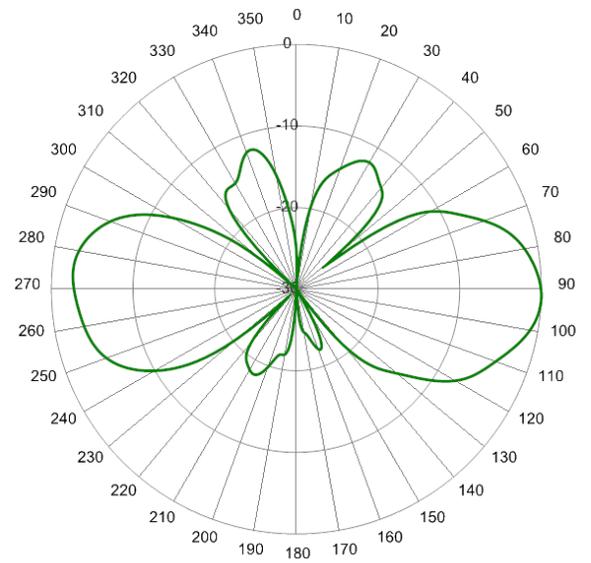
SCA360F-BU2D

#### Typical Antenna Patterns

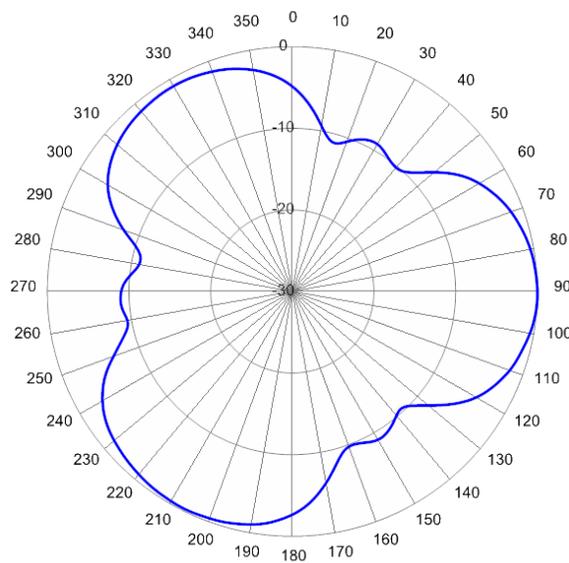
For detailed information on additional antenna patterns, contact customer support at [support@cciproducts.com](mailto:support@cciproducts.com)



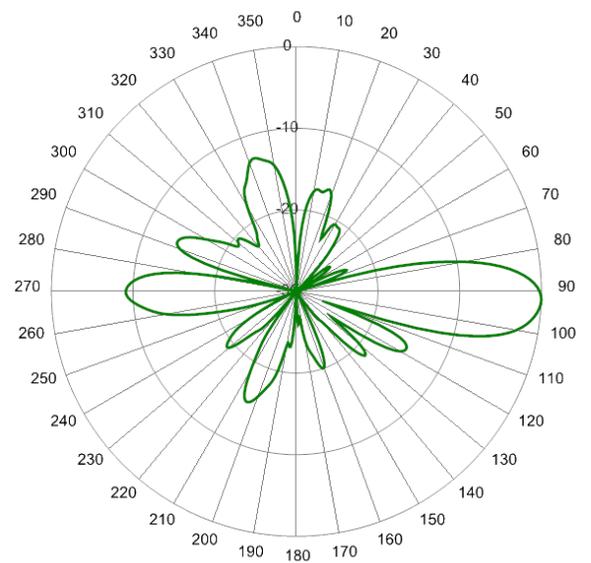
737 MHz Azimuth



737 MHz Azimuth Elevation 2°



2110 MHz Azimuth



2110 MHz Azimuth Elevation 2°



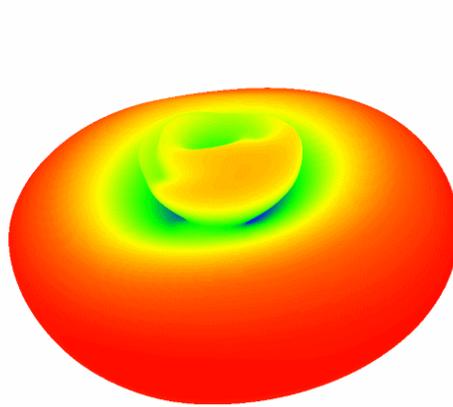
# Antennas

## SPECIFICATIONS

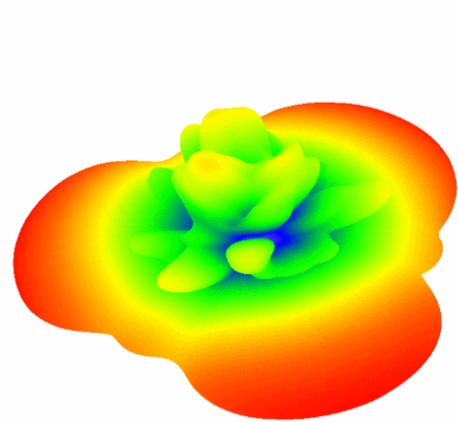
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#### 3D Antenna Patterns



737 MHz



2110 MHz





# Antennas

ORDERING

Multi-Band Quasi-Omni Antenna

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Parts & Accessories

<b>SCA360F-BU2DA-K</b>	Two foot (0.6 m) antenna Omni, Multiband, 7-16 DIN connectors with mounting bolt and lock washer
<b>SCA360F-BU2DB-K</b>	Two foot (0.6 m) antenna Omni, Multiband, 4.3-10 connectors with mounting bolt and lock washer
<b>SCA360F-BU2DA-K1</b>	Two foot (0.6 m) antenna Omni, Multiband, 7-16 DIN connectors with mounting bolt and lock washer plus MBC-02 mounting kit
<b>SCA360F-BU2DB-K1</b>	Two foot (0.6 m) antenna Omni, Multiband, 4.3-10 connectors with mounting bolt and lock washer plus MBC-02 mounting kit
<b>MBC-02</b>	Clamp kit, Pipe range 1 - 2.5 in. or lag bolt to wooden pole or flat surface (lag bolts not supplied)



# Antennas

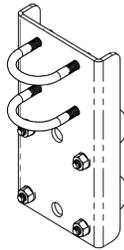
ACCESSORIES

## Triple Mount Mast Bracket

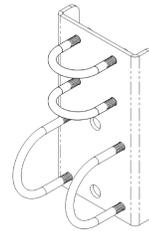
MBC-02

Mechanical

<b>Dimensions (L x W x D)</b>	7.9x4.3x1.1 in. (200x108x28 mm)
<b>Weight</b>	2.4 lbs (1.1 kg)
<b>Fastener Size</b>	5/16 UNC
<b>Installation Torque (ft-lbs)</b>	10



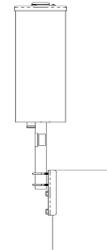
Bracket Vert. Mount View



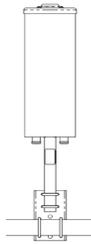
Bracket Hort. Mount View



Vertical Pole Mount



Wooden Pole Mount



Horizontal Pole Mount



# Antennas

## STANDARDS & CERTIFICATIONS

### Multi-Band Quasi-Omni Antenna

SCA360F-BU2D

#### 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 606529, IP 24

#### Certifications

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



# CCI

## Communication Components Inc.

EXTENDING WIRELESS PERFORMANCE