

DATA SHEET

### Wideband Quasi-Omni Antenna

SCA-OM-360F2-E-H2S



- Two foot (0.5 m), two port, quasi-omni antenna with uniform horizontal beamwidths covering the extended band from 1710-2690 MHz
- 360° of coverage area across all bands of operation in a single 20.5" x 6.6" compact radome
- One pair of cross-polarized ports for 2x2 MIMO covering the full operating frequency range
- Small size and center mount post make it ideal for mounting on utility, lighting and traffic poles
- Fixed tilt options of 2, 6 or 12 degrees
- · Optional GPS antenna integrated into the radome
- · Sharp elevation beamwidth aides in network planning
- Simple single housing blends easily into urban environments
- Simplified radio assignments due to all band design
- Only one antenna is needed due to multi-band operation
- Excellent PIM Performance

#### Overview

CCI's extended high band band quasi-omni Small Cell antenna covers the full 1710-2690 MHz frequency range and provides omnidirectional coverage in a single canister radome. The unique design of the CCI antenna elements provides for extremely stable azimuth patterns over the full operating frequency range ensuring consistent coverage area for all bands of operation. The extended band Quasi-Omni antenna is an ideal choice for Microcells and Small Cell applications in urban and suburban environments where antenna size and count are restricted. The antenna includes a center mount post which is well suited for mounting to utility, lighting and traffic poles.

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

### **Applications**

- Macro, Min-Macro and Small Cells deployments in Urban, Suburban and other visually sensitive environments
- Meets Macro Cell Antenna Performance criteria.



**SPECIFICATIONS** 

### Wideband Quasi-Omni Antenna

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#### Electrical

Ports	2 × Ports which cover the ful	l range from 1710-2690 MHz
Frequency Range	1850-1995 MHz	2496-2690 MHz
Gain	7.8 dBi	7.6 dBi
Elevation Beamwidth (-3dB)	17.7°	13.6°
Electrical Downtilt	2° (6° and 12° tilts available)	
First upper sidelobes	< -14 dB	< -14 dB
Cross-Polar Port-to-Port Isolation	> 26 dB	> 26 dB
Voltage Standing Wave Ratio(VSWR)	< 1.5:1	< 1.5:1
Passive Intermodulation (2×20W)	≤ -150 dBc	≤ -150 dBc
Input Power Continuous Wave (CW)	300 watts	300 watts
Polarization	Dual Linear 45°	Dual Linear 45°
Input Impedance	50 ohms	50 ohms
Lightning Protection	DC Ground	DC Ground

#### Mechanical

Dimensions (L $\times$ D) 20.5  $\times$  6.6 in (520  $\times$  168 mm)

Survival Wind Speed > 150 mph (> 241 kph)

Front Wind Load 17 lbs (76.4 N) @ 100 mph (161 kph)

Equivalent Flat Plate Area 0.7 ft<sup>2</sup> (0.1 m<sup>2</sup>)

Weight \* 5.5 lbs (2.5 kg)

Connector (RF)  $2 \times 4.1$ -9.5 female

Connector (GPS)(if equipped)  $1 \times \text{Type N-female}$ 

Mounting Pole 1 to 2.5 in (25 to 63 mm)

Wall mount Hardware 0.5 in. (12.7 mm) diameter recommended

\* Weight excludes mounting



SPECIFICATIONS

Wideband Quasi-Omni Antenna

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Bottom View



With GPS option

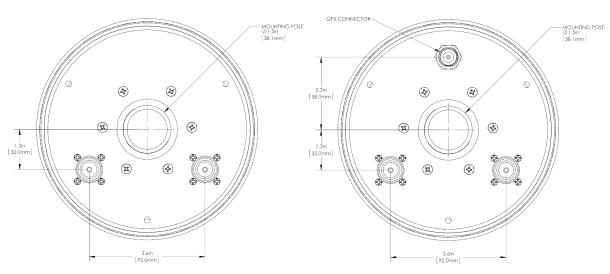


Mechanical

Connector Spacing

Without GPS option

With GPS option





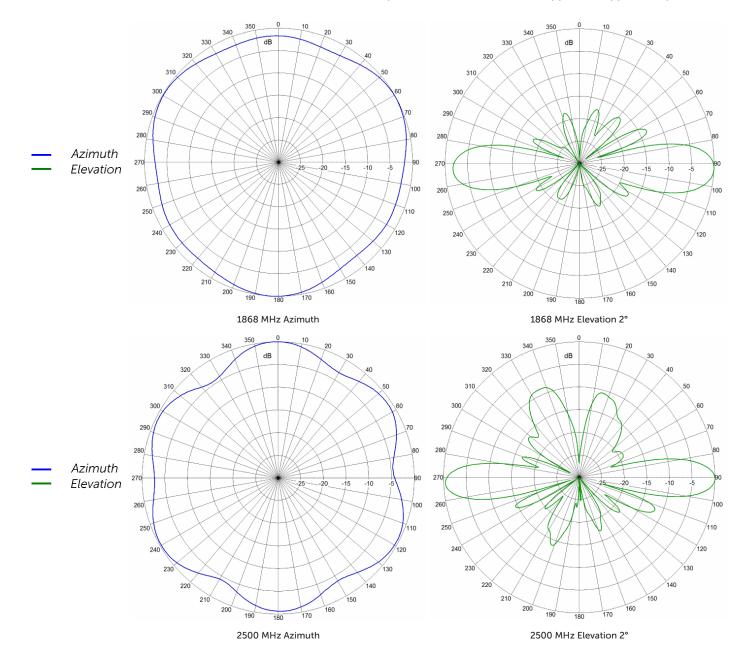
**SPECIFICATIONS** 

Wideband Quasi-Omni Antenna

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Typical Antenna Patterns

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



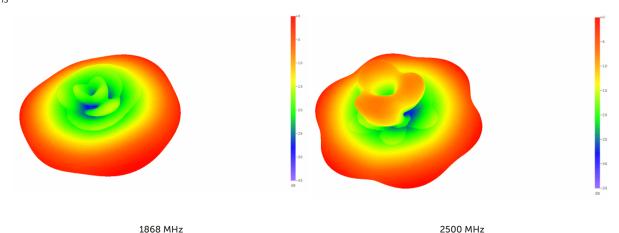


SPECIFICATIONS

Wideband Quasi-Omni Antenna

SCA-OM-360F2-E-H2S

3D Antenna Patterns





**ORDERING** 

### Wideband Quasi-Omni Antenna

SCA-OM-360F2-E-H2S

### Parts & Accessories

SCA-OM-360F2-E-H2S-K	Two foot antenna Quasi Omni, Wideband, 2 degree fixed downtilt and MBC-02 clamp kit (suitable for pole or wall top mounting)
SCA-OM-360F6-E-H2S-K	Two foot antenna Quasi Omni, Wideband, 6 degree fixed downtilt and MBC-02 clamp kit (suitable for pole or wall top mounting)
SCA-OM-360F12-E-H2S-K	Two foot antenna Quasi Omni, Wideband, 12 degree fixed downtilt and MBC-02 clamp kit (suitable for pole or wall top mounting)
SCA-OM-360F2-E-H2S-K1	Two foot antenna Quasi Omni, Wideband, 2 degree fixed downtilt and MBC-05 clamp kit (suitable for pole top mounting)
SCA-OM-360F6-E-H2S-K1	Two foot antenna Quasi Omni, Wideband, 6 degree fixed downtilt and MBC-05 clamp kit (suitable for pole top mounting)
SCA-OM-360F12-E-H2S-K1	Two foot antenna Quasi Omni, Wideband, 12 degree fixed downtilt and MBC-05 clamp kit (suitable for pole top mounting)
SCA-OM-360F2-E-H2SG-K	Two foot antenna Quasi Omni, Wideband, 2 degree fixed downtilt with internal GPS receiver and MBC-02 clamp kit (suitable for pole or wall mounting)
SCA-OM-360F6-E-H2SG-K	Two foot antenna Quasi Omni, Wideband, 6 degree fixed downtilt with internal GPS receiver and MBC-02 clamp kit (suitable for pole or wall mounting)
SCA-OM-360F12-E-H2SG-K	Two foot antenna Quasi Omni, Wideband, 12 degree fixed downtilt with internal GPS receiver and MBC-02 clamp kit (suitable for pole or wall mounting)
SCA-OM-360F2-E-H2SG-K1	Two foot antenna Quasi Omni, Wideband, 2 degree fixed downtilt with internal GPS receiver and MBC-05 clamp kit (suitable for pole top mounting)
SCA-OM-360F6-E-H2SG-K1	Two foot antenna Quasi Omni, Wideband, 6 degree fixed downtilt with internal GPS receiver and MBC-05 clamp kit (suitable for pole top mounting)
SCA-OM-360F12-E-H2SG-K1	Two foot antenna Quasi Omni, Wideband, 12 degree fixed downtilt with internal GPS receiver and MBC-05 clamp kit (suitable for pole top mounting)
MBC-02	Clamp kit, Pipe range 1 - 2.5 in. 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.



**ACCESSORIES** 

### Triple Mount Mast Bracket

MBC-02

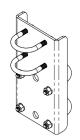
#### Mechanical

**Dimensions (L x W x D)** 7.9×4.3×1.1 in. (200×108×28 mm)

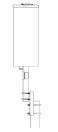
Weight 2.4 lbs (1.1 kg)

Fastener Size 5/16 UNC

Installation Torque (ft-lbs) 10



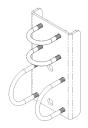
Bracket Vert. Mount View



Vertical Pole Mount



Horizontal Pole Mount



Bracket Hort. Mount View



Wooden Pole Mount



**ACCESSORIES** 

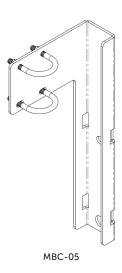
Mounting Bracket Kit

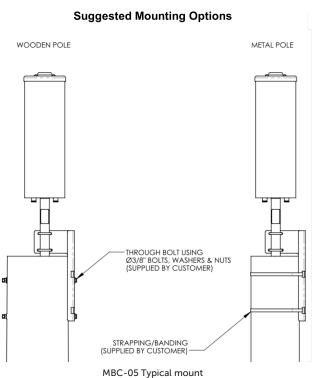
MBC-05

Mechanical

Weight 4.1 lbs (1.8 kg)

Mounting Pole Dimension 4 in (10 cm) and greater







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 606529, IP 24

Certifications

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









