



Antennas

DATA SHEET

Small Cell 65 Degree Panel Antenna

SCA65F-A2A



- Small Cell Sector antenna covering 2300-2400 MHz band
- Cross-Pol design for 2x2 MIMO
- Excellent upper sidelobe suppression
- Designed for superior Front to Back performance
- Excellent PIM Performance
- Fixed tilt of 2 degrees
- Small form factor
- Lightweight < 5 lbs (2.3 kg)

Overview

CCI's Highband Small Cell Panel Antenna is optimized for 2300-2400 MHz band and provides 65° of sectoral coverage in a small form factor panel antenna. The unique design of the CCI antenna elements provides for extremely stable azimuth patterns over the full operating frequency ranges, thus ensuring consistent coverage area for all bands of operation. The Small Cell Panel Antenna is the ideal choice for Macro, Mini-Macro and Small Cell applications in urban and suburban environments where antenna size and count are restricted. The antenna is well suited for mounting to utility, lighting and traffic poles.

CCI antennas are designed and produced to ISO 9001:2008 certification standards for reliability and quality in our state-of-the-art manufacturing facilities.

Applications

- Macro, Mini-Macro and Small Cell deployments in Urban, Suburban and other visually sensitive environments
- Meets Macro Cell Antenna performance criteria



Antennas

SPECIFICATIONS

Small Cell 65 Degree Panel Antenna

SCA65F-A2A

Electrical

Ports	2 x High Band Ports for 2300-2400 MHz
Frequency Range	2300-2400 MHz
Gain (dBi)	13.0
Azimuth Beamwidth (°)	65
Azimuth Beamwidth Squint (°)	1.5
Elevation Beamwidth (°)	20.0
Electrical Downtilt (°)	2
First Upper Sidelobe (dB)	< -18
Front-to-Back Ratio over $\pm 15^\circ$ (dB)	> 28
Cross-Polar Discrimination at Peak (dB)	> 19
Cross-Polar Discrimination over Sector (dB)	> 10
Cross-Polar Port-to-Port Isolation (dB)	> 25
Voltage Standing Wave Ratio (VSWR)	< 1.5:1
Passive Intermodulation 2x20W (dBc)	≤ -150
Input Power Continuous Wave (W)	300
Polarization	Dual Linear 45°
Input Impedance	50 ohms
Lightning Protection	DC Ground

Mechanical

Dimensions (LxWxD)	16.9x6.8x4.5 in (430x172x114 mm)
Survival Wind Speed	> 150 mph (> 241 kph)
Front Wind Load	24 lbs (109 N) @ 100 mph (161 kph)
Side Wind Load	17 lbs (75 N) @ 100 mph (161 kph)
Equivalent Flat Plate Area	1.0 ft ² (0.1 m ²)
Weight *	4.9 lbs (2.2 kg)
Connector	2 x 4.3-10 female
Mounting Pole	4" (10 cm) and larger

* Weight excludes mounting



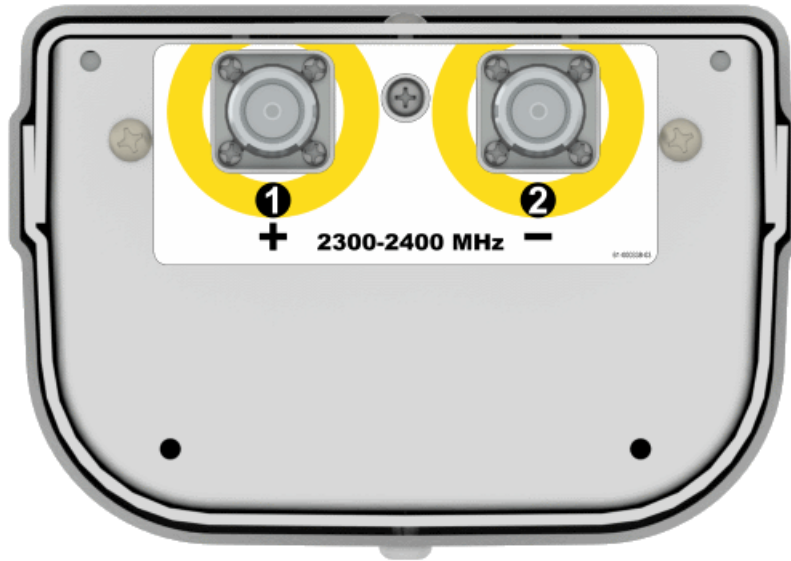
Antennas

SPECIFICATIONS

Small Cell 65 Degree Panel Antenna

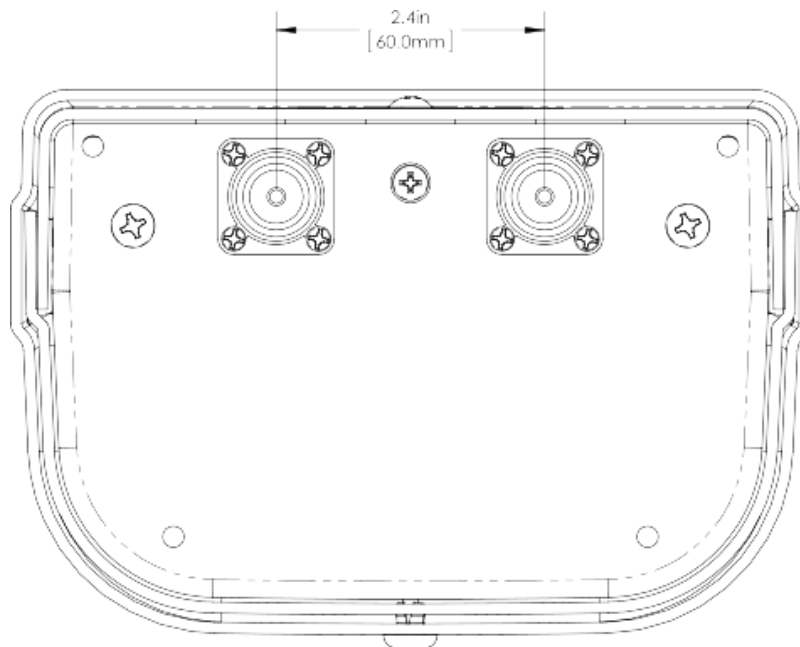
SCA65F-A2A

Bottom View



Mechanical

Connector Spacing





Antennas

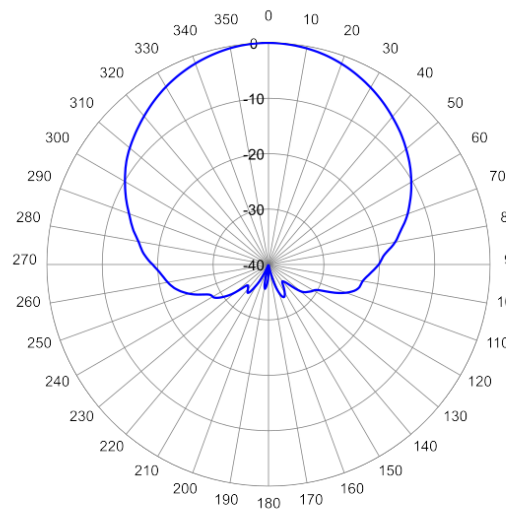
SPECIFICATIONS

Small Cell 65 Degree Panel Antenna

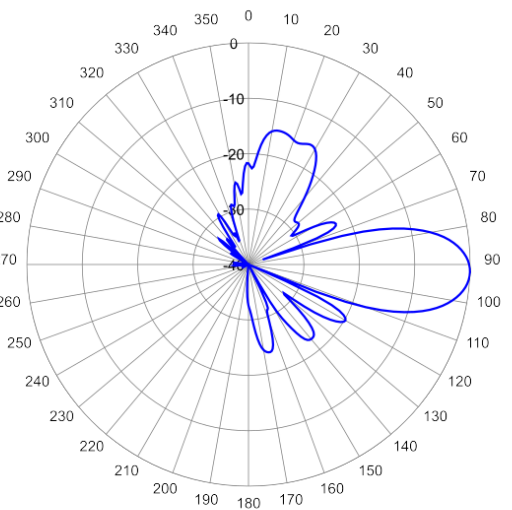
SCA65F-A2A

Typical Antenna Patterns

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



2400 MHz Azimuth



2400 MHz Elevation 2°



Antennas

ORDERING

Small Cell 65 Degree Panel Antenna

SCA65F-A2A

Parts & Accessories

SCA65F-A2AA-K 1.5 foot (0.4 m) antenna with 65° azimuth beamwidth and 2° fixed electrical downtilt, 4.3-10 connectors and MBK-07 Mounting Bracket kit

MBK-07 Mounting bracket kit with $\pm 20^\circ$ of mechanical tilt adjustment



Antennas

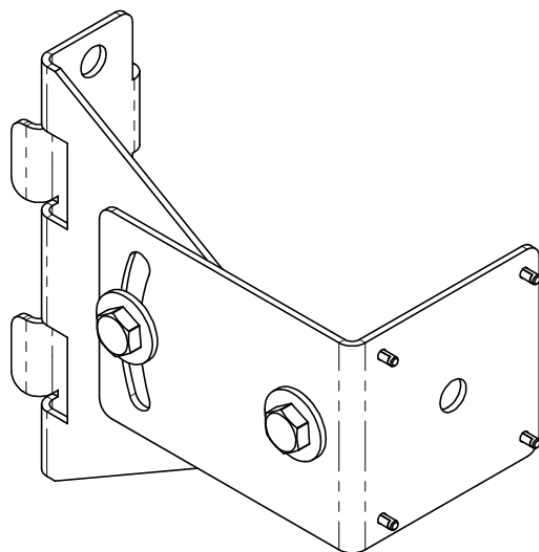
ACCESSORIES

Mounting Bracket Kit

MBK-07

Mechanical

Weight	2.7 lbs (1.2 kg)
Mounting Pole Dimension	4 in (10 cm) and greater
Mechanical Tilt Adjustment	$\pm 20^\circ$



MBK-07

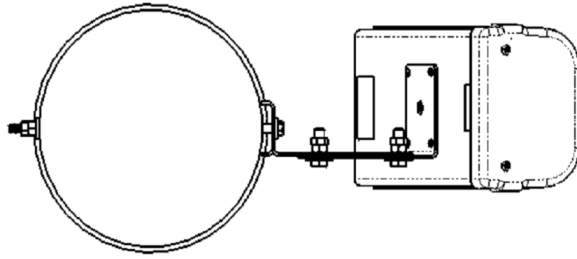


Antennas

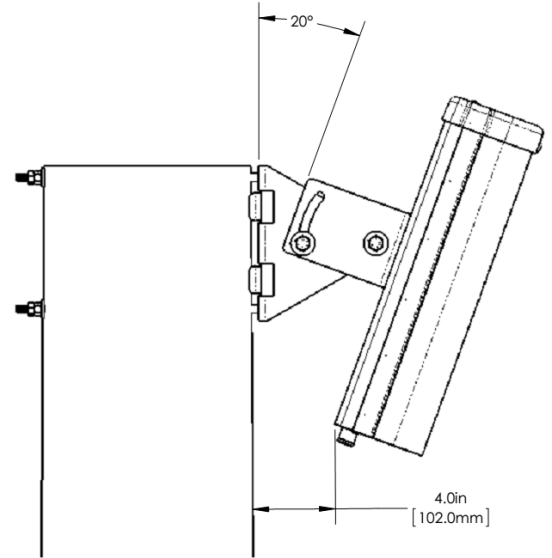
ACCESSORIES

Mounting Bracket Kit

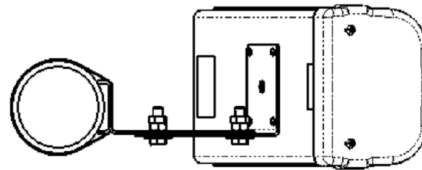
MBK-07



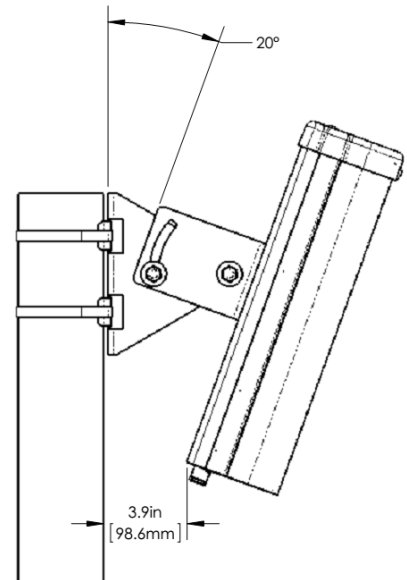
MBK-07 Typical Wooden Pole mount



MBK-07 Typical Wooden Pole mount



MBK-07 Typical Steel Pole mount



MBK-07 Typical Steel Pole mount



Antennas

STANDARDS & CERTIFICATIONS

Small Cell 65 Degree Panel Antenna

SCA65F-A2A

Standards & Compliance

Certifications

ISO 9001:2008



CCI Communication Components Inc.
EXTENDING WIRELESS PERFORMANCE