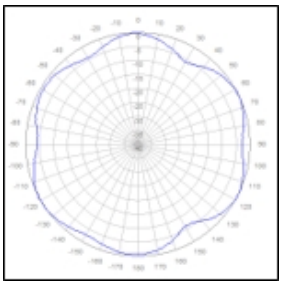
CX06OMI436-0C/8C

NWAV™ X-Pol OMNI Cantenna

Hex-port 4 ft 360° cantenna with RET-controlled HB:

2 ports 698-894 MHz and 4 ports 1695-2180 MHz

- X-Pol, Small Cell, hex-port antenna
- Suitable for pole or building mount
- 2x2 MIMO low-band and 4x4 MIMO high-band
- Internal beam combining
- Dependent RET control for HB ports
- Suitable for LTE/UMTS/CDMA/GSM technologies



Omni clover

Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Frequency bands, MHz	698-798	824-894	1695-1880	1850-1990	1920-2180
Polarization	±45°		±45°		
Average gain over all tilts, dBi	8.1	8.5	11.7	12.2	12.5
Horizontal beamwidth (HBW), degrees	360°		360°		
Front-to-back ratio, co-polar power @180º ± 30°, dB	>21	>21	>25	>25	>25
Vertical beamwidth (VBW), degrees[1]	19.5°	16.7°	7.7°	7.2°	6.6°
Cross polarization discrimination at boresight, dB	15	15	15	15	15
Electrical downtilt (EDT) range, degrees	0°, 8° (FET)		2-8° (RET)		
First upper side lobe (USLS) suppression, dB	≤-15	≤-16	≤-15	≤-15	≤-15
Cross-polar isolation, port-to-port, dB[1]	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		
Maximum input power per port, watts	150		150		
Maximum total input power, watts	1800				

[1] Typical value over frequency and tilt

Ordering information	
Antenna model	**Description**
CX06OMI436-0C	4F X-Pol HEX OMNI 360° LB 0° FET, 1695-2700 MHz 2-8° RET, 4.3-10
CX06OMI436-8C	4F X-Pol HEX OMNI 360° LB 8° FET, 1695-2700 MHz 2-8° RET, 4.3-10
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations

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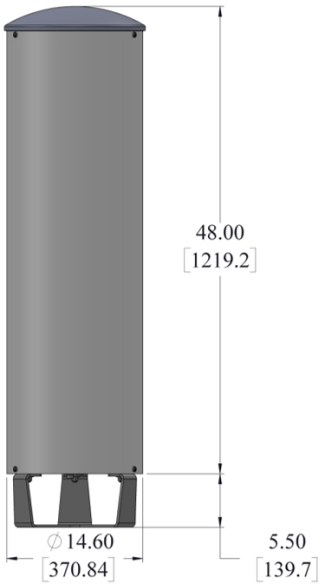
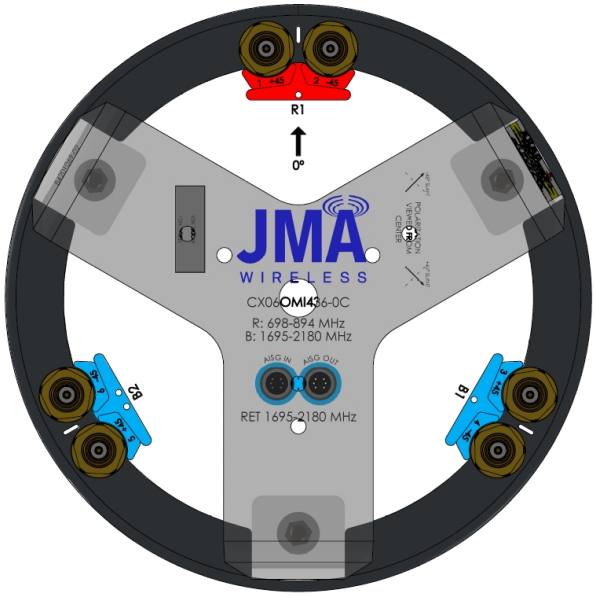
Mechanical specifications	
Dimensions height/diameter, inches (mm)	48.0/ 14.0 (1219.2/ 355)
Antenna volume (cubic feet)	4.27
No. of RF input ports, connector type, and location	6 x 4.3-10 female, bottom
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)
Net antenna weight, lb (kg)	50 (22.7)
Rated wind survival speed, mph (km/h)	150 (241)
Frontal wind loading @ 160 km/h, lbf (N)	84.1 (374.2)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	1.68

Front view



End view: 0C shown for reference

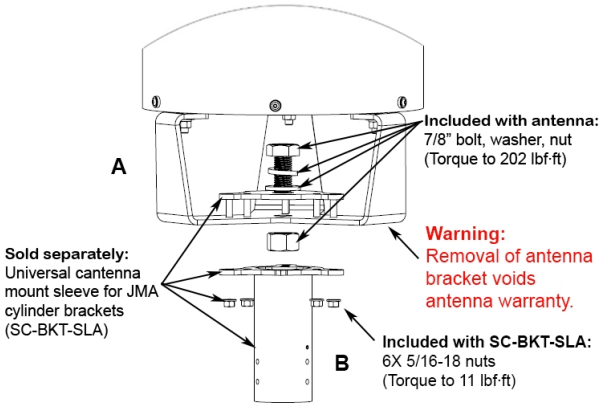
The 0 degree reference arrow corresponds to the 0 degree position in the antenna pattern file. Each antenna pattern file uses a top down orientation view (the patterns are viewed from the top of the antenna looking down).



Notes on cylinder brackets

- All CX* antennas come with the bottom mount bracket (marked as **A**) factory-installed (all factory testing is done with bracket attached)
- Hardware is included with each antenna to connect bottom bracket to different mounting systems.
- JMA cylinder brackets are compatible with bottom mount via universal cantenna mount sleeve (marked as **B**), sold separately.
- To mitigate potential risk of PIM issues, the recommended torque values need to be applied.

Mounting details



Small Cell solutions and mounting systems (sold separately)

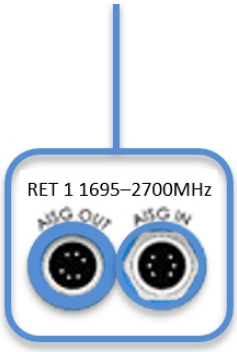
Side Arm Mounting System	SC-BKT-SA4-(color)	Wide Diameter Pole	SC-BKT-WTPE4-(color)
Steel Pole Mounting System	SC-BKT-SLA (color)		

Remote electrical tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	2 pairs of AISG male/female connectors
RET interface connector location	Bottom of the antenna
Total no. of internal RETs high bands	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

RET topology

A single RET device controls all 3 sectors via the designated external AISG connector as shown below:

RET device	Band	RF port
1	1695-2180	3-6



Array topology

3 sets of radiating arrays

R1: 698-894 MHz
B1: 1695-2180 MHz
B2: 1695-2180 MHz

Band	RF port
1695-2180	3-4
698-894	1-2
1695-2180	5-6