



# CX200MI536-1C

NWAV™ Cylinder Antenna

20-port cylinder antenna 698-3980 MHz:

4 ports 698-894, 8 ports 1695-2690 MHz, and 8 ports 3400-3980 MHz

- Macro Cell Omni antenna
- Supports deployments with 4x4 MIMO capability with all bands
- Excellent cross-polar discrimination and upper side lobe suppression for enhanced MIMO performance
- Higher gain for midband and low band for better coverage and in-building penetration
- Superior omnidirectionality gain consistently across 4x4 MIMO
- Supports midband 4T8R for improved uplink performance



NWAV™

	Low band		Mid band				3.5 GHz			
Frequency bands, MHz	698-894		1695-2690				3400-3980			
Array	R1	R2	Y1	Y2	Y3	Y4	P1	P2	P3	P4
Connector	4 PORTS		8 PORTS				8 PORTS			
Polarization	XPOL		XPOL				XPOL			
Horizontal beamwidth (HBW), degrees <sup>1</sup>	360		360				360			
Electrical downtilt (EDT), degrees <sup>1</sup>	10		4				4			
Configuration	Quasi omni antenna									
Connector type	(20x) 4.3-10 female									
Dimensions, in. (mm)	61.5/ 14.6 (1562.1/ 370.8)									
Maximum composite power, watts (all ports)	1000									
Radome color	Gray (Pantone 420C)									

<sup>1</sup> Typical value over frequency and tilt.



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### Electrical specifications Low Band ■ R1 ■ R2

Frequency range, MHz	698-894
Polarization	(2x) ± 45°
Gain, BASTA, dBi	9.1 ± 0.4
Gain, MAX, dBi	9.5
Cross-polar discrimination over 360° <sup>1</sup>	>15
First upper side lobe (USLS) suppression, dB <sup>1</sup>	>15
Horizontal beamwidth (HBW), 3 dB, degrees <sup>1</sup>	360
Vertical beamwidth (VBW), 3dB, degrees <sup>1</sup>	23
Electrical downtilt (EDT), degrees	10
Impedance, ohms	50
VSWR	≤ 1.5:1
PIM, 2x20W carrier, dBc	< -153
Isolation, intra-band, dB	>25
Isolation, inter-band, dB	>28
Input power per port, watts	150

### Electrical specifications Mid Band ■ Y1 ■ Y2 ■ Y3 ■ Y4

Frequency range, MHz	1695-2690			
Frequency sub-range, MHz	1695-1880	1850-1990	1920-2200	2300-2690
Polarization	(4x) ± 45°			
Gain, BASTA, dBi	10.9 ± 0.3	11.2 ± 0.4	11.5 ± 0.3	11.7 ± 0.3
Gain, MAX, dBi	11.4	11.6	11.8	12.0
Cross-polar discrimination over 360° <sup>1</sup>	>16	>15	>15	>15
First upper side lobe (USLS) suppression, dB <sup>1</sup>	>15	>15	>15	>15
Horizontal beamwidth (HBW), 3 dB, degrees <sup>1</sup>	360	360	360	360
Vertical beamwidth (VBW), 3dB, degrees <sup>1</sup>	11.0	10.7	10.0	9.5
Electrical downtilt (EDT), degrees	4			
Impedance, ohms	50			
VSWR	≤ 1.5:1			
PIM, 2x20W carrier, dBc	< -153			
Isolation, intra-band, dB	>25			
Isolation, inter-band, dB	>28			
Input power per port, watts	125			

## Electrical specification 3400-3980 MHz P1 P2 P3 P4

Frequency range, MHz	3400-3550	3550-3700	3700-3980
Polarization	(4x) ± 45°		
Gain, BASTA, dBi	10.6 ± 0.3	11.1 ± 0.5	11.5 ± 0.5
Gain, MAX, dBi	10.9	11.6	11.8
Cross-polar discrimination over 360° <sup>1</sup>	>15		
First upper side lobe (USLS) suppression, dB <sup>1</sup>	>15		
Horizontal beamwidth (HBW), 3 dB, degrees <sup>1</sup>	360		
Vertical beamwidth (VBW), 3dB, degrees <sup>1</sup>	9.7 ± 0.3	9.2 ± 0.4	9.0 ± 0.3
Electrical downtilt (EDT), degrees	4		
Impedance, ohms	50		
VSWR	≤ 1.5:1		
PIM, 2x20W carrier, dBc	<-145		
Isolation, intra-band, dB	>25		
Isolation, inter-band, dB	>28		
Input power per port, watts	100		

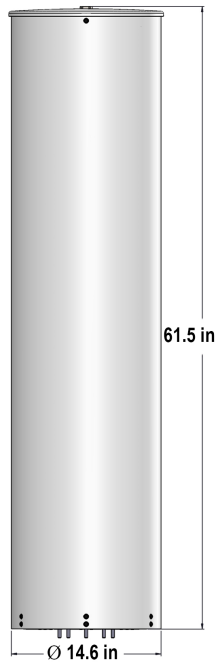
## Mechanical specifications

Dimensions height/diameter, inches (mm)	61.5/ 14.6 (1562.1/ 370.8)
Antenna volume (cubic feet)	6
No. of RF input ports, connector type, and location	20 x 4.3-10 RF, bottom
RF connector torque	96 lbf-in (10.85 N·m or 8 lbf-ft)
Net antenna weight, lb (kg)	56 (25.4)
Rated wind survival speed, mph (km/h)	150 (241)
Frontal wind loading @ 160 km/h, lbf (N)	135.4 (602.3)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	2.73

## Array topology

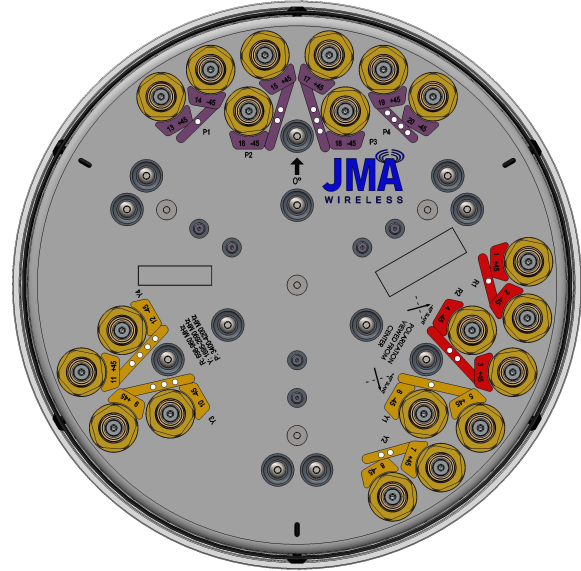
10 sets of radiating arrays  R1: 698-960 MHz R2: 698-960 MHz Y1: 1695-2690 MHz Y2: 1695-2690 MHz Y3: 1695-2690 MHz Y4: 1695-2690 MHz P1: 3400-3980 MHz P2: 3400-3980 MHz P3: 3400-3980 MHz P4: 3400-3980 MHz	<table border="1"> <thead> <tr> <th>Band</th> <th>RF port</th> </tr> </thead> <tbody> <tr><td>698-960</td><td>1-2</td></tr> <tr><td>698-960</td><td>3-4</td></tr> <tr><td>1695-2690</td><td>5-6</td></tr> <tr><td>1695-2690</td><td>7-8</td></tr> <tr><td>1695-2690</td><td>9-10</td></tr> <tr><td>1695-2690</td><td>11-12</td></tr> <tr><td>3400-3980</td><td>13-14</td></tr> <tr><td>3400-3980</td><td>15-16</td></tr> <tr><td>3400-3980</td><td>17-18</td></tr> <tr><td>3400-3980</td><td>19-20</td></tr> </tbody> </table>	Band	RF port	698-960	1-2	698-960	3-4	1695-2690	5-6	1695-2690	7-8	1695-2690	9-10	1695-2690	11-12	3400-3980	13-14	3400-3980	15-16	3400-3980	17-18	3400-3980	19-20	
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	3400-3980	19-20																						

Front view



End view

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).

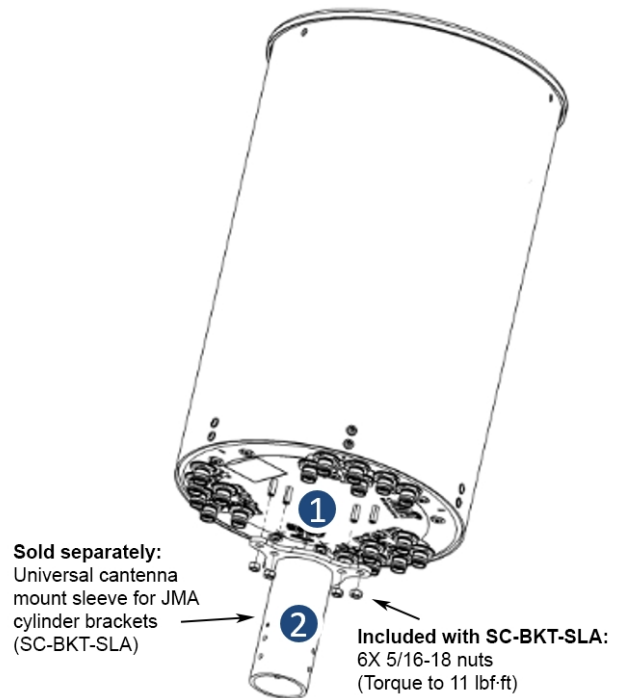


End view details: 6 stud bolts for direct mount to the Universal Sleeve (SC-BKT-SLA)

Notes on mounting brackets

- The antenna comes with the bottom mount studs (marked as 1 ) factory-installed.
- JMA cylinder brackets are compatible with bottom mount via universal antenna mount sleeve (marked as 2 ) (SC-BKT-SLA), sold separately with JMA cylinder mounting systems.
- To mitigate potential risk of PIM issues, the recommended torque values need to be applied.

Example bracket configuration





# CX20OMI536-1C

## NWAV™ Cylinder Antenna

Ordering information			
<b>Antenna model</b>		<b>Description</b>	
CX20OMI536-1C		5ft 20 Port OMNI antenna 4LB 8MB 8 3.5GHz	
Small Cell solutions and mounting systems (sold separately)			
<a href="#">Side Arm Mounting System</a>	SC-BKT-SA-(color)	<a href="#">Wide Diameter Pole</a>	SC-BKT-WTPE-(color)
<a href="#">Steel Pole Mounting System</a>	SC-BKT-SLA (color)		