



CX08HYB224-1H

NWAV™ Cylinder Antenna

8-port cylinder antenna 1695-3980 MHz:

4 ports 1695-2690 MHz and 4 ports 3400-3980 MHz

- Small Cell multi-port PCS/AWS/CBRS/C-Band cylinder antenna
- 4x4 1695-3980 MHz
- 1695-2690, Ports 1 & 2, 120 degrees sector
- 1695-2690, Ports 3 & 4, 240 degrees sector
- 3400-3980, Ports 5-8, Quasi Omni heart pattern
- Excellent cross-polar discrimination for MIMO performance



NWAV

Electrical specification (min/max)	Ports 1, 2, 3, 4			
Frequency bands, MHz	1695-1880	1850-1990	1920-2280	2300-2690
Polarization	± 45°			
Gain, dBi (max)	11.8	12.4	12.7	13.2
Gain, dBi (average)	11.5±0.3	12.2±0.2	12.3±0.4	12.9±0.3
Horizontal beamwidth (HBW), degrees ¹	69	68	66	64
Vertical beamwidth (VBW), degrees ¹	30.0	28.0	26.0	25.0
Cross-polar discrimination over boresight ¹	18.0	18.0	18.0	20.0
Electrical downtilt (EDT), degrees	2°			
Cross-polar isolation, dB ¹	25			
Max VSWR / return loss, dB	1.5:1 / -14.0			
Max PIM, 3rd order 2x20W carrier, dBc	-153			
Maximum input power port, watts	125			
Electrical specification (min/max)	Ports 5, 6, 7, 8			
Frequency bands, MHz	3400-3700		3700-3980	
Polarization	± 45°			
Gain, dBi (max)	10.3		11.0	
Gain, dBi (average)	10.1±0.2		10.7±0.3	
Horizontal beamwidth (HBW), degrees ¹	240°			
Vertical beamwidth (VBW), degrees ¹	15.7°		15°	
Cross-polar discrimination over 240° ¹	17.2		16.9	
Electrical downtilt (EDT), degrees	2°		2°	
Cross-polar isolation, dB ¹	25			
Max VSWR / return loss, dB	1.5:1 / -14.0			
Max PIM, 2x20W carrier, dBc	-145			
Maximum input power port, watts	100			
Maximum composite power, watts (all ports)	1000			

¹ Typical value over frequency and tilt.



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Mechanical specifications	
Dimensions height/diameter, inches (mm)	24.0/ 7.8 (609.6/ 198.1)
Antenna volume (cubic feet)	0.66
No. of RF input ports, connector type, and location	8 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)	23 (10.43)
Rated wind survival speed, mph (km/h)	150 (241)
Frontal wind loading @ 160 km/h, lbf (N)	23.6 (104.9)

Front view	End view
	<p>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).</p>
	<p>End view details: 6 stud bolts for direct mount to the Universal Sleeve (SC-BKT-SLA)</p>

Ordering information	
Antenna model	Description
CX08HYB224-1H	2ft 8 Port Hybrid Omni Antenna 4MB 4CBRS/C-Band

Notes on mounting brackets	Example bracket configuration
<ul style="list-style-type: none"> 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. 	<p>Sold separately: Universal antenna mount sleeve for JMA cylinder brackets (SC-BKT-SLA)</p> <p>Included with SC-BKT-SLA: 6X 5/16-18 nuts (Torque to 11 lbf-ft)</p>

Array topology												
<p>4 sets of radiating arrays</p> <p>Y1: 1695-2690 MHz Y2: 1695-2690 MHz P1: 3400-3980 MHz P2: 3400-3980 MHz</p>	<table border="1"> <thead> <tr> <th>Band</th> <th>RF port</th> </tr> </thead> <tbody> <tr> <td>1695-2690</td> <td>1-2</td> </tr> <tr> <td>1695-2690</td> <td>3-4</td> </tr> <tr> <td>3400-3980</td> <td>5-6</td> </tr> <tr> <td>3400-3980</td> <td>7-8</td> </tr> </tbody> </table>	Band	RF port	1695-2690	1-2	1695-2690	3-4	3400-3980	5-6	3400-3980	7-8	
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