

# 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



**NAV** 

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 <sup>1</sup>	69	68	66	64
Vertical beamwidth (VBW), degrees <sup>1</sup>	30.0	28.0	26.0	25.0
Cross-polar discrimination over boresight <sup>1</sup>	18.0	18.0	18.0	20.0
Electrical downtilt (EDT), degrees	2°			
Cross-polar isolation, dB <sup>1</sup>	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 <sup>1</sup>	240°	
Vertical beamwidth (VBW), degrees <sup>1</sup>	15.7°	15°
Cross-polar discrimination over 240° <sup>1</sup>	17.2	16.9
Electrical downtilt (EDT), degrees	2°	2°
Cross-polar isolation, dB <sup>1</sup>	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	

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

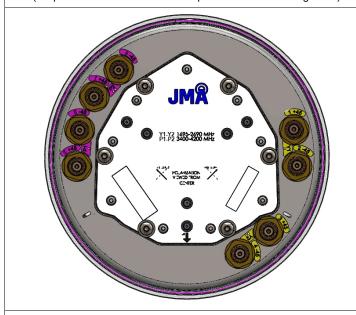


Mechanical specifications		
Dimensions height/diameter, inches (mm)	24.0/ 7.8 (609.6/ 198.1)	
Antenna volume (cubic feet)	0.66	
No. of RF input ports, connector type, and location	8 x 4.3-10 female, bottom	
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)	
Net antenna weight, lb (kg)	23 (10.43)	
Rated wind survival speed, mph (km/h)	150 (241)	
Frontal wind loading @ 160 km/h, lbf (N)	23.6 (104.9)	



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** 



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

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



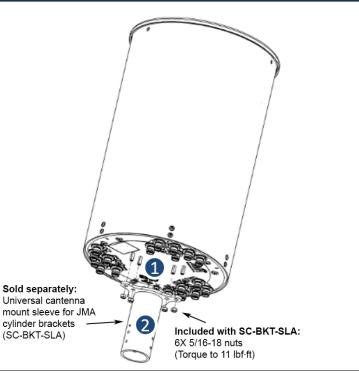
# CX08HYB224-1H

### **NWAV™** Cylinder Antenna

#### 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 cantenna 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



#### **Array topology**

4 sets of radiating arrays

Y1: 1695-2690 MHz Y2: 1695-2690 MHz P1: 3400-3980 MHz P2: 3400-3980 MHz

Band	RF port
1695-2690	1-2
1695-2690	3-4
3400-3980	5-6
3400-3980	7-8

