



CX08OMI236-25

NWAV™ Cylinder Antenna

8-port cylinder antenna 2496-2690 MHz:

- Small Cell multi-port cylinder antenna for increased coverage & capacity applications
- 8x8 beamforming-capable for 2496-2690 MHz
- Increased gain for improved coverage
- Excellent cross-polar discrimination for MIMO performance



| Electrical specifications, Single Column [non-beamforming] (maximum/minimum) | Ports 1, 2, 3, 4, 5, 6, 7, 8 |
|--|------------------------------|
| Frequency bands, MHz | 2496-2690 |
| Gain, dBi | 9.2 |
| Vertical beamwidth (VBW), degrees ¹ | 10.7 |
| Vertical beamwidth tolerance, degrees | ±0.5 |
| Electrical tilt | 2 |
| First upper side lobe (USLS) suppression, dB ¹ | 15 |
| Coupling level, Amp, Antenna port to Cal port, dB | 26 |
| Coupling level, max Amp Δ, Antenna port to Cal port, dB | ±0.5 |
| Coupler, max Amp Δ, Antenna port to Cal port, dB | 0.65 |
| Coupler, max Phase Δ, Antenna port to Cal port, degrees | 4 |
| Cross-polar isolation, port-to-port, dB ¹ | 25 |
| Max VSWR / return loss, dB | 1.5:1 / -14.0 |
| Max passive intermodulation (PIM), 2x20W carrier, dBc | -153 |
| Max input power per port at 50 °C, watts | 75 |

¹ Typical value over frequency and tilt.

| Electrical specification, Broadcast | Ports 1, 2, 3, 4, 5, 6, 7, 8 |
|---|------------------------------|
| Frequency bands, MHz | 2496-2690 |
| Gain, dBi | 14.2 |
| Horizontal beamwidth (HBW), degrees ¹ | 75 |
| Vertical beamwidth (VBW), degrees ¹ | 10.7 |
| Vertical beamwidth tolerance, degrees | ±0.5 |
| First upper side lobe (USLS) suppression, dB ¹ | <-15 |

| Electrical specification, Service Beam | Ports 1, 2, 3, 4, 5, 6, 7, 8 |
|---|------------------------------|
| Frequency bands, MHz | 2496-2690 |
| Steered 0° gain, dBi | 14.4 |
| Steered 0° Gain tolerance, dBi | ±0.3 |
| Steered 0° Beamwidth, Horizontal, degrees | 20.5 |



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| Electrical specification, Service Beam | Ports 1, 2, 3, 4, 5, 6, 7, 8 |
|---|------------------------------|
| Steered 0° CPR at beampeak, dB | 18 |
| Steered 0° Horizontal Sidelobe, dB | 13 |
| Steered 30° Gain, dBi (max) | 13.3 |
| Steered 30° Gain tolerance, dBi | ±0.3 |
| Steered 30° Beamwidth, Horizontal, degree | 23.2 |
| Steered 30° CPR at beampeak, dB | 18 |
| Steered 30° Horizontal Sidelobe, dB | 10 |

| Mechanical specifications | |
|--|-----------------------------------|
| Dimensions height/diameter, inches (mm) | 24.0/ 14.6 (609.6/ 370.8) |
| Antenna volume (cubic feet) | 2.32 |
| No. of RF input ports, connector type, and location | 8 x 4.3-10 female, bottom |
| Calibration interface port, connector type, and location | 1 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) | 30 (13.6) |
| Rated wind survival speed, mph (km/h) | 185 (298) |
| Rated wind operational speed, mph (km/h) | 150 (241) |
| Frontal wind loading @ 160 km/h, lbf (N) | 30 (133) |
| Equivalent flat plate @ 100 mph and Cd=2, sq ft | 1.17/0.69 |

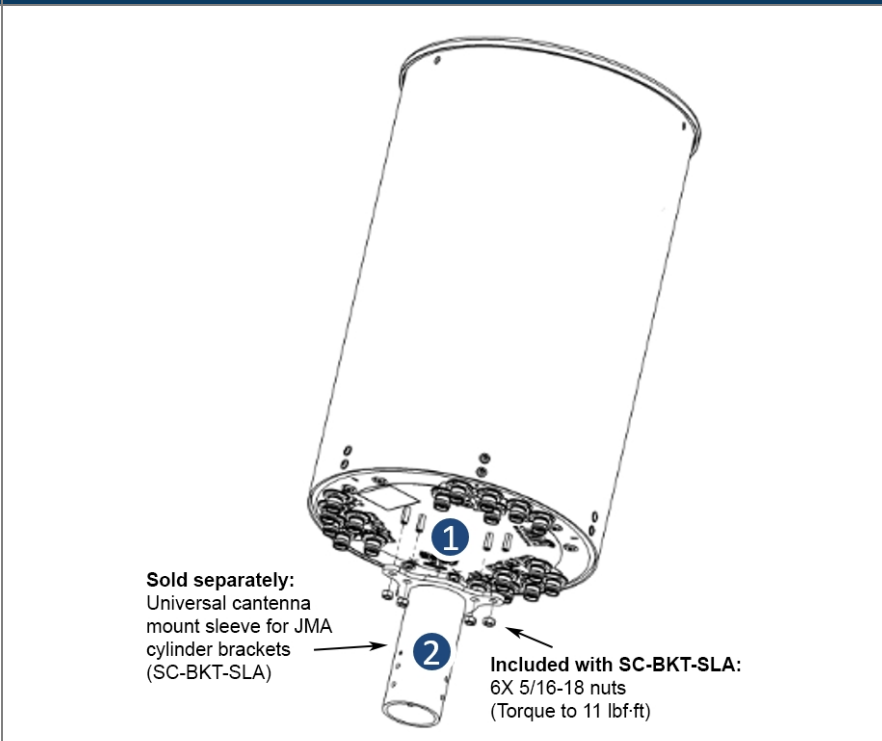
| Front view | End view |
|------------|--|
| | <p>The 0 degree reference arrow corresponds to the 0 degree position in the antenna pattern file. Each antenna pattern file uses a top down orientation view (the patterns are viewed from the top of the antenna looking down).</p> <p>End view details: 6 stud bolts for direct mount to the Universal Sleeve (SC-BKT-SLA)</p> |

Ordering information

| Antenna model | Description |
|---------------|------------------------------|
| CX08OMI236-25 | 2ft 8 Port OMNI antenna 8BRS |

| Notes on mounting brackets | Example bracket configuration |
|----------------------------|-------------------------------|
|----------------------------|-------------------------------|

- 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.



Small Cell solutions and mounting systems (sold separately)

| | | | |
|--|--------------------|------------------------------------|---------------------|
| Side Arm Mounting System | SC-BKT-SA-(color) | Wide Diameter Pole | SC-BKT-WTPE-(color) |
| Steel Pole Mounting System | SC-BKT-SLA (color) | | |

Array topology

| 8 sets of radiating arrays Y1: 2496-2690 MHz Y2: 2496-2690 MHz Y3: 2496-2690 MHz Y4: 2496-2690 MHz | <table border="1"> <thead> <tr> <th>Band</th> <th>RF port</th> </tr> </thead> <tbody> <tr> <td>2496-2690</td> <td>1, 2, 3, 4, 5, 6, 7, 8</td> </tr> </tbody> </table> | Band | RF port | 2496-2690 | 1, 2, 3, 4, 5, 6, 7, 8 | |
|--|---|---------|---------|-----------|------------------------|--|
| | Band | RF port | | | | |
| 2496-2690 | 1, 2, 3, 4, 5, 6, 7, 8 | | | | | |