



# CX16OMI236-3Cxy

NWAV™ Cylinder Antenna

16-port cylinder antenna 1695-3980 MHz:

8 ports 1695-2690 MHz and 8 ports 3400-3980 MHz

- Small Cell multi-port PCS/AWS/CBRS/C-Band cylinder antenna
- Suitable for multi-carrier applications
- 4x4 or 8x8 MIMO-capable 1695-3980 MHz
- Symmetrical pattern performance across all ports
- Excellent cross-polar discrimination for MIMO performance



NWAV™

| Electrical specification (min/max)                | Ports 1, 2, 3, 4, 5, 6, 7, 8 |           |           |           |
|---|------------------------------|-----------|-----------|-----------|
| Frequency bands, MHz                              | 1695-1880                    | 1850-1990 | 1920-2280 | 2300-2690 |
| Polarization                                      | ± 45°                        |           |           |           |
| Gain, dBi (max)                                   | 6.8                          | 7.0       | 7.2       | 8.1       |
| Gain, dBi (average)                               | 6.3±0.5                      | 6.5±0.5   | 6.5±0.7   | 7.5±0.6   |
| Horizontal beamwidth (HBW), degrees <sup>1</sup>  | 360°                         |           |           |           |
| Vertical beamwidth (VBW), degrees <sup>1</sup>    | 31.0                         | 29.0      | 27.1      | 22.8      |
| Cross-polar discrimination over 360° <sup>1</sup> | 15.8                         | 16.2      | 16.5      | 17.1      |
| Electrical downtilt (EDT), degrees                | 2° or 6° or 10°              |           |           |           |
| 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 9, 10, 11, 12, 13, 14, 15, 16 |           |
|---|-------------------------------------|-----------|
| Frequency bands, MHz                              | 3400-3700                           | 3700-3980 |
| Polarization                                      | ± 45°                               |           |
| Gain, dBi (max)                                   | 8.7                                 | 9.3       |
| Gain, dBi (average)                               | 8.3±0.4                             | 8.5±0.8   |
| Horizontal beamwidth (HBW), degrees <sup>1</sup>  | 360°                                |           |
| Vertical beamwidth (VBW), degrees <sup>1</sup>    | 15.7°                               | 15°       |
| Cross-polar discrimination over 360° <sup>1</sup> | 17.2                                | 16.9      |
| Electrical downtilt (EDT), degrees                | 4°                                  | 4°        |
| 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>1</sup> Typical value over frequency and tilt.



# CX16OMI236-3Cxy

## NWAV™ Cylinder Antenna

| Mechanical specifications                           |                                   |
|---|-----------------------------------|
| Dimensions height/diameter, inches (mm)             | 24.0/ 11.8 (609.6/ 299.7)         |
| Antenna volume (cubic feet)                         | 1.52                              |
| No. of RF input ports, connector type, and location | 16 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>Dimensions shown:<br/>           Total height: [609.60] 24.000<br/>           Diameter: [299.72] Ø11.800</p> | <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  |
| CX16OMI236-3Cxy<br>(xy represents the fixed down tilt value per 4 ports for 1695-2690 MHz) | 2ft 16 Port OMNI antenna 8MB 8CBRS/C-Band<br>xy= 2, 6, or 10 deg FET per 4 ports 1695-2700 MHz value<br>x= FET value for ports 1-4 (Y1 & Y3)<br>y= FET value for ports 5-8 (Y2 & Y4) |

| Notes on mounting brackets   | Example bracket configuration  |
|--|--|
| <ul style="list-style-type: none"> <li>The antenna comes with the bottom mount studs (marked as <b>1</b>) factory-installed.</li> <li>JMA cylinder brackets are compatible with bottom mount via universal antenna mount sleeve (marked as <b>2</b>) (SC-BKT-SLA), sold separately with JMA cylinder mounting systems.</li> <li>To mitigate potential risk of PIM issues, the recommended torque values need to be applied.</li> </ul> | <p><b>Sold separately:</b><br/>Universal antenna mount sleeve for JMA cylinder brackets (SC-BKT-SLA)</p> <p><b>Included with SC-BKT-SLA:</b><br/>6X 5/16-18 nuts<br/>(Torque to 11 lbf-ft)</p> |

| 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) |                                    |                     |

| Array topology  |  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
|---|--|------|---------|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|------|-----------|-------|-----------|-------|-----------|-------|--|
| <p>8 sets of radiating arrays</p> <p>Y1: 1695-2690 MHz<br/>           Y2: 1695-2690 MHz<br/>           Y3: 1695-2690 MHz<br/>           Y4: 1695-2690 MHz<br/>           P1: 3400-3980 MHz<br/>           P2: 3400-3980 MHz<br/>           P3: 3400-3980 MHz<br/>           P4: 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>1695-2690</td><td>5-6</td></tr> <tr><td>1695-2690</td><td>7-8</td></tr> <tr><td>3400-3980</td><td>9-10</td></tr> <tr><td>3400-3980</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> </tbody> </table> | Band | RF port | 1695-2690 | 1-2 | 1695-2690 | 3-4 | 1695-2690 | 5-6 | 1695-2690 | 7-8 | 3400-3980 | 9-10 | 3400-3980 | 11-12 | 3400-3980 | 13-14 | 3400-3980 | 15-16 |  |
| Band  | RF port  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
| 1695-2690   | 1-2  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
| 1695-2690   | 3-4  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
| 1695-2690   | 5-6  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
| 1695-2690   | 7-8  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
| 3400-3980   | 9-10   |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
| 3400-3980   | 11-12  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
| 3400-3980   | 13-14  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |
| 3400-3980   | 15-16  |      |         |           |     |           |     |           |     |           |     |           |      |           |       |           |       |           |       |  |