12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 6x RET.

- Features broadband Low Band (698-896 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4x MIMO) capability for Band 14, AWS, PCS and WCS applications.
- Independent tilt for all arrays.
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band.
- Optimized SPR performance across all operating bands.
- Excellent wind loading characteristics.

### Electrical Specifications

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Gain, dBi</td>
<td>15.7</td>
<td>16.1</td>
<td>17.0</td>
<td>17.5</td>
<td>17.7</td>
<td>17.8</td>
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<tr>
<td>Beamwidth, Horizontal, degrees</td>
<td>75</td>
<td>73</td>
<td>58</td>
<td>59</td>
<td>61</td>
<td>59</td>
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<tr>
<td>Beamwidth, Vertical, degrees</td>
<td>9.7</td>
<td>8.6</td>
<td>7.9</td>
<td>7.4</td>
<td>7.0</td>
<td>6.3</td>
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<tr>
<td>Beam Tilt, degrees</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
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<tr>
<td>USLS (First Lobe), dB</td>
<td>19</td>
<td>19</td>
<td>17</td>
<td>18</td>
<td>20</td>
<td>18</td>
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<tr>
<td>Front-to-Back Ratio at 180°, dB</td>
<td>32</td>
<td>33</td>
<td>39</td>
<td>42</td>
<td>39</td>
<td>40</td>
</tr>
<tr>
<td>Isolation, Inter-band, dB</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
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<tr>
<td>VSWR</td>
<td>Return Loss, dB</td>
<td>1.5</td>
<td>14.0</td>
<td>1.5</td>
<td>14.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Input Power per Port at 50°C, maximum, watts</td>
<td>300</td>
<td>300</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>200</td>
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<tr>
<td>Polarization</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
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<tr>
<td>Impedance</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
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### Electrical Specifications, BASTA*

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>Gain by all Beam Tilts, average, dBi</td>
<td>15.2</td>
<td>15.9</td>
<td>16.5</td>
<td>17.1</td>
<td>17.2</td>
<td>17.3</td>
</tr>
<tr>
<td>Gain by all Beam Tilts Tolerance, dB</td>
<td>±0.7</td>
<td>±0.4</td>
<td>±0.8</td>
<td>±0.6</td>
<td>±0.6</td>
<td>±0.7</td>
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<tr>
<td>Gain by Beam Tilt, average, dBi</td>
<td>2 °</td>
<td>15.2</td>
<td>2 °</td>
<td>15.8</td>
<td>2 °</td>
<td>16.6</td>
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<tr>
<td>Beamwidth, Horizontal Tolerance, degrees</td>
<td>±2.4</td>
<td>±2.1</td>
<td>±4.8</td>
<td>±2.4</td>
<td>±3.2</td>
<td>±3.8</td>
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<tr>
<td>Beamwidth, Vertical Tolerance, degrees</td>
<td>±0.8</td>
<td>±0.5</td>
<td>±0.4</td>
<td>±0.3</td>
<td>±0.5</td>
<td>±0.3</td>
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<tr>
<td>USLS, beampeak to 20° above beampeak, dB</td>
<td>16</td>
<td>17</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Front-to-Back Total Power at 180° ±30°, dB</td>
<td>23</td>
<td>22</td>
<td>31</td>
<td>33</td>
<td>29</td>
<td>27</td>
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<tr>
<td>CPR at Boresight, dB</td>
<td>22</td>
<td>24</td>
<td>20</td>
<td>21</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>CPR at Sector, dB</td>
<td>9</td>
<td>6</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, download the whitepaper Time to Raise the Bar on BSAs.

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Array Layout

<table>
<thead>
<tr>
<th>Array</th>
<th>Freq (MHz)</th>
<th>Conns</th>
<th>RET (SRET)</th>
<th>AISG RET UID</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>698-896</td>
<td>1-2</td>
<td>1</td>
<td>CPxxxxxxxxxxxxxxxxR1</td>
</tr>
<tr>
<td>R2</td>
<td>698-896</td>
<td>3-4</td>
<td>2</td>
<td>CPxxxxxxxxxxxxxxxxR2</td>
</tr>
<tr>
<td>Y1</td>
<td>1695-2360</td>
<td>5-6</td>
<td>3</td>
<td>CPxxxxxxxxxxxxxxxxY1</td>
</tr>
<tr>
<td>Y2</td>
<td>1695-2360</td>
<td>7-8</td>
<td>4</td>
<td>CPxxxxxxxxxxxxxxxxY2</td>
</tr>
<tr>
<td>Y3</td>
<td>1695-2360</td>
<td>9-10</td>
<td>5</td>
<td>CPxxxxxxxxxxxxxxxxY3</td>
</tr>
<tr>
<td>Y4</td>
<td>1695-2360</td>
<td>11-12</td>
<td>6</td>
<td>CPxxxxxxxxxxxxxxxxY4</td>
</tr>
</tbody>
</table>

(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration
General Specifications

Operating Frequency Band
1695 – 2360 MHz | 698 – 896 MHz
Antenna Type
Sector
Band
Multiband
Performance Note
Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Total Input Power, maximum
900 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total
12
RF Connector Quantity, low band
4
RF Connector Quantity, high band
8
RF Connector Interface
4.3-10 Female
Grounding Type
RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material
Low loss circuit board
Radome Material
Fiberglass, UV resistant
Reflector Material
Aluminum
RF Connector Location
Bottom
Wind Loading, frontal
954.0 N @ 150 km/h
214.5 lbf @ 150 km/h
Wind Loading, lateral
331.0 N @ 150 km/h
74.4 lbf @ 150 km/h
Wind Loading, maximum
1235.0 N @ 150 km/h
277.6 lbf @ 150 km/h
Effective Projected Area (EPA), frontal
0.90 m² | 9.69 ft²
Effective Projected Area (EPA), lateral
0.31 m² | 3.34 ft²
Wind Speed, maximum
241 km/h | 150 mph

Dimensions

Length
2438.0 mm | 96.0 in
Width
498.0 mm | 19.6 in
Depth
197.0 mm | 7.8 in
Net Weight, without mounting kit
46.3 kg | 102.1 lb

Remote Electrical Tilt (RET) Information

Input Voltage
10–30 Vdc
Internal RET
High band (4) | Low band (2)
Power Consumption, idle state, maximum
1 W
Power Consumption, normal conditions, maximum
8 W
Protocol
3GPP/AISG 2.0 (Single RET)
NNH4-65C-R6-V1

RET Hardware
CommRET v2

RET Interface
8-pin DIN Female  |  8-pin DIN Male

RET Interface, quantity
1 female  |  1 male

Packed Dimensions
Length
2630.0 mm  |  103.5 in
Width
608.0 mm  |  23.9 in
Depth
352.0 mm  |  13.9 in
Shipping Weight
67.8 kg  |  149.5 lb

Regulatory Compliance/Certifications
Agency
RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014

Classification
Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)

Included Products
BSAMNT-3 — Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

BSAMNT-M — Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

Footnotes
Performance Note  Severe environmental conditions may degrade optimum performance