10-port sector/multibeam antenna, 2x 694–960 MHz 65° HPBW and 8x 1695–2180 MHz 4x 33°HPBW, 5x RET with tilt indicators

- All Internal RET actuators are connected in “Cascaded RET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

**Electrical Specifications**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Gain, dBi</td>
<td>16.4</td>
<td>16.9</td>
<td>16.9</td>
<td>18.4</td>
<td>19.3</td>
<td>19.8</td>
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<tr>
<td>Beam Centers, Horizontal, degrees</td>
<td>±27</td>
<td>±27</td>
<td>±27</td>
<td>±27</td>
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<tr>
<td>Beamwidth, Horizontal, degrees</td>
<td>68</td>
<td>65</td>
<td>65</td>
<td>33</td>
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<tr>
<td>Beamwidth, Vertical, degrees</td>
<td>8.9</td>
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<td>7.4</td>
<td>7.2</td>
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<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>
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<tr>
<td>USLS (First Lobe), dB</td>
<td>17</td>
<td>20</td>
<td>19</td>
<td>16</td>
<td>16</td>
<td>17</td>
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<tr>
<td>Front-to-Back Ratio at 180°, dB</td>
<td>32</td>
<td>34</td>
<td>34</td>
<td>28</td>
<td>34</td>
<td>36</td>
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<tr>
<td>Isolation, Cross Polarization, dB</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>25</td>
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<td>25</td>
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<tr>
<td>Isolation, Inter-band, dB</td>
<td>30</td>
<td>30</td>
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<tr>
<td>Isolation, Beam to Beam, dB</td>
<td>17</td>
<td>17</td>
<td>17</td>
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<tr>
<td>VSWR</td>
<td>Return Loss, dB</td>
<td>1.46</td>
<td>1.46</td>
<td>1.46</td>
<td>1.46</td>
<td>1.46</td>
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<tr>
<td>PIM, 3rd Order, 2 x 20 W, dBc</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
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<tr>
<td>Input Power per Port at 50°C, maximum, watts</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>250</td>
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<tr>
<td>Polarization</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>
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**Electrical Specifications, BASTA***

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<tbody>
<tr>
<td>Gain by all Beam Tilts, average, dBi</td>
<td>16.3</td>
<td>16.7</td>
<td>16.8</td>
<td>17.7</td>
<td>18.8</td>
<td>19.3</td>
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<tr>
<td>Gain by all Beam Tilts Tolerance, dBi</td>
<td>±0.2</td>
<td>±0.3</td>
<td>±0.3</td>
<td>±1.1</td>
<td>±0.6</td>
<td>±0.7</td>
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<tr>
<td>Beamwidth, Horizontal Tolerance, degrees</td>
<td>±1.3</td>
<td>±1.4</td>
<td>±1.9</td>
<td>±1.8</td>
<td>±1.7</td>
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<tr>
<td>Beamwidth, Vertical Tolerance, degrees</td>
<td>±0.5</td>
<td>±0.4</td>
<td>±0.4</td>
<td>±0.3</td>
<td>±0.3</td>
<td>±0.4</td>
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<tr>
<td>USLS, beampeak to 20° above beampeak, dB</td>
<td>17</td>
<td>18</td>
<td>17</td>
<td>15</td>
<td>16</td>
<td>17</td>
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<tr>
<td>Front-to-Back Total Power at 180° ± 30°, dB</td>
<td>25</td>
<td>24</td>
<td>24</td>
<td>24</td>
<td>27</td>
<td>28</td>
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<tr>
<td>CPR at Boresight, dB</td>
<td>16</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>CPR at Sector, dB</td>
<td>10</td>
<td>10</td>
<td>9</td>
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<tr>
<td>CPR at 10 dB Horizontal Beamwidth, dB</td>
<td>6</td>
<td>8</td>
<td>10</td>
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* 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>
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<tbody>
<tr>
<td>R1</td>
<td>694-960</td>
<td>1-2</td>
<td>1</td>
<td>CPxxxxxxxxxxxxxxR1</td>
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<tr>
<td>B1</td>
<td>1695-2180</td>
<td>3-4</td>
<td>2</td>
<td>CPxxxxxxxxxxxxxxB1</td>
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<tr>
<td>B2</td>
<td>1695-2180</td>
<td>5-6</td>
<td>3</td>
<td>CPxxxxxxxxxxxxxxB2</td>
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<tr>
<td>B3</td>
<td>1695-2180</td>
<td>7-8</td>
<td>4</td>
<td>CPxxxxxxxxxxxxxxB3</td>
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<td>B4</td>
<td>1695-2180</td>
<td>9-10</td>
<td>5</td>
<td>CPxxxxxxxxxxxxxxB4</td>
</tr>
</tbody>
</table>

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

Port Configuration
General Specifications

Operating Frequency Band 1695 – 2180 MHz | 694 – 960 MHz
Antenna Type Sector
Band Multiband
Performance Note Outdoor usage
Total Input Power, maximum 1000 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total 10
RF Connector Quantity, low band 2
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 Copper | Low loss circuit board
Radome Material Fiberglass, UV resistant
Reflector Material Aluminum
RF Connector Location Bottom
Wind Loading, frontal 477.0 N @ 150 km/h
107.2 lbf @ 150 km/h
Wind Loading, lateral 409.0 N @ 150 km/h
91.9 lbf @ 150 km/h
Wind Loading, maximum 1010.0 N @ 150 km/h
227.1 lbf @ 150 km/h
Wind Speed, maximum 241 km/h | 150 mph

Dimensions

Length 2688.0 mm | 105.8 in
Width 350.0 mm | 13.8 in
Depth 208.0 mm | 8.2 in
Net Weight, without mounting kit 35.0 kg | 77.2 lb

Remote Electrical Tilt (RET) Information

Input Voltage 10–30 Vdc
Internal RET High band (4) | Low band (1)
Power Consumption, idle state, maximum 1 W
Power Consumption, normal conditions, maximum 8 W
Protocol 3GPP/AISG 2.0 (Single RET)
RET Hardware CommRET v2
RET Interface 8-pin DIN Female | 8-pin DIN Male
R2HH-6533D-R5

RET Interface, quantity

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 female</td>
<td>1 male</td>
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</table>

Packed Dimensions

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Length</td>
<td>2830.0 mm</td>
<td>111.4 in</td>
</tr>
<tr>
<td>Width</td>
<td>460.0 mm</td>
<td>18.1 in</td>
</tr>
<tr>
<td>Depth</td>
<td>350.0 mm</td>
<td>13.8 in</td>
</tr>
<tr>
<td>Weight</td>
<td>50.0 kg</td>
<td>110.2 lb</td>
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</table>

Regulatory Compliance/Certifications

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
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<tbody>
<tr>
<td>RoHS 2011/65/EU</td>
<td>Compliant by Exemption</td>
</tr>
<tr>
<td>ISO 9001:2015</td>
<td>Designed, manufactured and/or distributed under this quality management system</td>
</tr>
<tr>
<td>China RoHS SJ/T 11364-2014</td>
<td>Above Maximum Concentration Value (MCV)</td>
</tr>
</tbody>
</table>

Included Products

BSAMNT—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.

* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance
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.

General Specifications
Application: Outdoor
Includes: Brackets | Hardware
Package Quantity: 1

Mechanical Specifications
Color: Silver
Material Type: Galvanized steel

Dimensions
Compatible Diameter, maximum: 115.0 mm | 4.5 in
Compatible Diameter, minimum: 60.0 mm | 2.4 in
Net Weight: 6.6 kg | 14.6 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)