10-port sector/multibeam antenna, 2x 694–960 MHz 65° HPBW and 8x 1710–2180 MHz 4x 33° HPBW, 5x RET with tilt indicators

- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- All Internal RET actuators are connected in “Cascaded SRET” configuration
- 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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<tbody>
<tr>
<td>Gain, dBi</td>
<td>14.4</td>
<td>14.8</td>
<td>14.9</td>
<td>15.9</td>
<td>16.5</td>
<td>17.1</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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<td>Beamwidth, Horizontal, degrees</td>
<td>69</td>
<td>67</td>
<td>65</td>
<td>65</td>
<td>33</td>
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<tr>
<td>Beamwidth, Vertical, degrees</td>
<td>13.5</td>
<td>12.3</td>
<td>11.5</td>
<td>11.9</td>
<td>11.2</td>
<td>10.6</td>
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<tr>
<td>Beam Tilt, degrees</td>
<td>2–14</td>
<td>2–14</td>
<td>2–14</td>
<td>2–14</td>
<td>2–14</td>
<td>2–14</td>
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<tr>
<td>USLS (First Lobe), dB</td>
<td>14</td>
<td>16</td>
<td>17</td>
<td>17</td>
<td>18</td>
<td>19</td>
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<tr>
<td>Front-to-Back Ratio at 180°, dB</td>
<td>32</td>
<td>34</td>
<td>33</td>
<td>31</td>
<td>34</td>
<td>35</td>
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<tr>
<td>Isolation, Cross Polarization, dB</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>25</td>
<td>25</td>
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<tr>
<td>Isolation, Inter-band, dB</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>25</td>
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<tr>
<td>Isolation, Beam to Beam, dB</td>
<td>14</td>
<td>16</td>
<td>17</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>14.5</td>
<td>1.46</td>
<td>14.5</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>
<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>200</td>
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<td>Polarization</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>
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### Electrical Specifications, BASTA*

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<tbody>
<tr>
<td>Gain by all Beam Tilts, average, dBi</td>
<td>14.2</td>
<td>14.6</td>
<td>14.7</td>
<td>15.2</td>
<td>16.0</td>
<td>16.5</td>
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<tr>
<td>Gain by all Beam Tilts Tolerance, dB</td>
<td>±0.3</td>
<td>±0.4</td>
<td>±0.4</td>
<td>±1</td>
<td>±0.6</td>
<td>±0.8</td>
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<tr>
<td>Gain by Beam Tilt, average, dBi</td>
<td>2 °</td>
<td>14.3</td>
<td>2 °</td>
<td>14.6</td>
<td>2 °</td>
<td>14.9</td>
</tr>
<tr>
<td>Gain by Beam Tilt, average, dBi</td>
<td>8 °</td>
<td>14.2</td>
<td>8 °</td>
<td>14.7</td>
<td>8 °</td>
<td>14.8</td>
</tr>
<tr>
<td>Beamwidth, Horizontal Tolerance, degrees</td>
<td>±1.9</td>
<td>±2.3</td>
<td>±2.2</td>
<td>±1.7</td>
<td>±1.7</td>
<td>±1.7</td>
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<tr>
<td>Beamwidth, Vertical Tolerance, degrees</td>
<td>±1</td>
<td>±0.8</td>
<td>±0.7</td>
<td>±1</td>
<td>±0.9</td>
<td>±0.9</td>
</tr>
<tr>
<td>USLS, beampeak to 20° above beampeak, dB</td>
<td>14</td>
<td>16</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Front-to-Back Total Power at 180° ± 30°, dB</td>
<td>24</td>
<td>24</td>
<td>22</td>
<td>24</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>CPR at Boresight, dB</td>
<td>16</td>
<td>16</td>
<td>17</td>
<td>14</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>CPR at Sector, dB</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>4</td>
<td>4</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.
R2HH-6533A-R5

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>694-960</td>
<td>1-2</td>
<td>1</td>
<td>CPxxxxxxxxxxxxxR1</td>
</tr>
<tr>
<td>B1</td>
<td>1695-2180</td>
<td>3-4</td>
<td>2</td>
<td>CPxxxxxxxxxxxxxB1</td>
</tr>
<tr>
<td>B2</td>
<td>1695-2180</td>
<td>5-6</td>
<td>3</td>
<td>CPxxxxxxxxxxxxxB2</td>
</tr>
<tr>
<td>B3</td>
<td>1695-2180</td>
<td>7-8</td>
<td>4</td>
<td>CPxxxxxxxxxxxxxB3</td>
</tr>
<tr>
<td>B4</td>
<td>1695-2180</td>
<td>9-10</td>
<td>5</td>
<td>CPxxxxxxxxxxxxxB4</td>
</tr>
</tbody>
</table>

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

Port Configuration
General Specifications

**Operating Frequency Band**
1710 – 2180 MHz | 694 – 960 MHz

**Antenna Type**
Multibeam

**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**
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

**Radome Material**
Fiberglass, UV resistant

**Reflector Material**
Aluminum

**RF Connector Location**
Bottom

**Wind Loading, frontal**
254.0 N @ 150 km/h
57.1 lbf @ 150 km/h

**Wind Loading, lateral**
214.0 N @ 150 km/h
48.1 lbf @ 150 km/h

**Wind Loading, maximum**
539.0 N @ 150 km/h
121.2 lbf @ 150 km/h

**Wind Speed, maximum**
241 km/h | 150 mph

**Dimensions**

**Length**
1580.0 mm | 62.2 in

**Width**
350.0 mm | 13.8 in

**Depth**
208.0 mm | 8.2 in

**Net Weight**
25.0 kg | 55.1 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

**RET Interface, quantity**
1 female | 1 male
Packed Dimensions

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>1673.0 mm</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>456.0 mm</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>357.0 mm</td>
</tr>
<tr>
<td><strong>Shipping Weight</strong></td>
<td>38.0 kg</td>
</tr>
</tbody>
</table>

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.

*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
6.2 kg | 13.7 lb

Regulatory Compliance/Certifications
Agency
RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014
CE
Classification
Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)
Compliant with the relevant CE product directives