8-port multibeam antenna, 8x 1695–2400 MHz, 4x 38° HPBW, 4x RET with retractable tilt rods

- Enhances network capacity through six sectors site application with only three antenna faces
- Maximizes frequency spectrum utilization to increase Average Revenue Per User (ARPU)
- Reduces antenna count to minimize Cap-Ex and Op-Ex costs
- High gain with excellent sector edge roll-offs and azimuth sidelobe suppression
- Each antenna downtilt can be independently adjusted for greater flexibility in network optimization
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

### Electrical Specifications

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain, dBi</td>
<td>19.1</td>
<td>19.7</td>
<td>19.9</td>
<td>19.4</td>
</tr>
<tr>
<td>Beam Centers, Horizontal, degrees</td>
<td>±27</td>
<td>±27</td>
<td>±27</td>
<td>±27</td>
</tr>
<tr>
<td>Beamwidth, Horizontal, degrees</td>
<td>38</td>
<td>36</td>
<td>33</td>
<td>29</td>
</tr>
<tr>
<td>Beamwidth, Vertical, degrees</td>
<td>7.4</td>
<td>7.0</td>
<td>6.6</td>
<td>5.9</td>
</tr>
<tr>
<td>Beam Tilt, degrees</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
<td>2–12</td>
</tr>
<tr>
<td>USLS (First Lobe), dB</td>
<td>19</td>
<td>20</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Front-to-Back Ratio at 180°, dB</td>
<td>37</td>
<td>37</td>
<td>35</td>
<td>33</td>
</tr>
<tr>
<td>Isolation, Cross Polarization, dB</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Isolation, Inter-band, dB</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>VSWR</td>
<td>Return Loss, dB</td>
<td>1.46</td>
<td>14.5</td>
<td>1.46</td>
</tr>
<tr>
<td>PIM, 3rd Order, 2 x 20 W, dBc</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
<td>-150</td>
</tr>
<tr>
<td>Input Power per Port at 50°C, maximum, watts</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Polarization</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
<td>±45°</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
<td>50 ohm</td>
</tr>
</tbody>
</table>

### Electrical Specifications, BASTA*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain by all Beam Tilts, average, dBi</td>
<td>18.7</td>
<td>19.4</td>
<td>19.5</td>
<td>18.9</td>
</tr>
<tr>
<td>Gain by all Beam Tilts Tolerance, dB</td>
<td>±0.6</td>
<td>±0.4</td>
<td>±0.6</td>
<td>±0.7</td>
</tr>
<tr>
<td>Gain by Beam Tilt, average, dBi</td>
<td>2 °</td>
<td>18.7</td>
<td>2 °</td>
<td>19.2</td>
</tr>
<tr>
<td>Beamwidth, Horizontal Tolerance, degrees</td>
<td>±2</td>
<td>±1.7</td>
<td>±3</td>
<td>±2.9</td>
</tr>
<tr>
<td>Beamwidth, Vertical Tolerance, degrees</td>
<td>±0.4</td>
<td>±0.3</td>
<td>±0.5</td>
<td>±0.3</td>
</tr>
<tr>
<td>USLS, beampeak to 20° above beampeak, dB</td>
<td>16</td>
<td>18</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Front-to-Back Total Power at 180° ± 30°, dB</td>
<td>29</td>
<td>30</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td>CPR at Boresight, dB</td>
<td>21</td>
<td>22</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>CPR at Sector, dB</td>
<td>12</td>
<td>13</td>
<td>11</td>
<td>5</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.

Array Layout

<table>
<thead>
<tr>
<th>Array</th>
<th>Freq (MHz)</th>
<th>Conn</th>
<th>RET (SRET)</th>
<th>AISG RET UID</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>1695-2400</td>
<td>1-2</td>
<td>1</td>
<td>CPxxxxxxxxxxxxxXxB1</td>
</tr>
<tr>
<td>B2</td>
<td>1695-2400</td>
<td>3-4</td>
<td>2</td>
<td>CPxxxxxxxxxxxxxXxB2</td>
</tr>
<tr>
<td>B3</td>
<td>1695-2400</td>
<td>5-6</td>
<td>3</td>
<td>CPxxxxxxxxxxxxxXxXxXxB3</td>
</tr>
<tr>
<td>B4</td>
<td>1695-2400</td>
<td>7-8</td>
<td>4</td>
<td>CPxxxxxxxxxxxxxXxXxXxXxXxXxB4</td>
</tr>
</tbody>
</table>

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

Port Configuration
General Specifications

**Operating Frequency Band**
1695 – 2400 MHz

**Antenna Type**
Multibeam

**Band**
Single band

**Performance Note**
Outdoor usage

**Total Input Power, maximum**
400 W @ 50 °C

Mechanical Specifications

**RF Connector Quantity, total**
8

**RF Connector Quantity, high band**
8

**RF Connector Interface**
4.3-10 Female

**Color**
Light gray

**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**
125.7 lbf @ 150 km/h | 557.0 N @ 150 km/h

**Wind Loading, lateral**
175.0 N @ 150 km/h | 39.3 lbf @ 150 km/h

**Wind Loading, maximum**
170.6 lbf @ 150 km/h | 759.0 N @ 150 km/h
Wind Speed, maximum 241 km/h | 150 mph

Dimensions
Length 1350.0 mm | 53.1 in
Width 640.0 mm | 25.2 in
Depth 235.0 mm | 9.3 in
Net Weight, without mounting kit 30.8 kg | 67.9 lb

Remote Electrical Tilt (RET) Information
Input Voltage 10–30 Vdc
Internal RET High band (4)
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 2 female | 2 male

Packed Dimensions
Length 1501.0 mm | 59.1 in
Width 797.0 mm | 31.4 in
Depth 402.0 mm | 15.8 in
Shipping Weight 41.7 kg | 91.9 lb

Regulatory Compliance/Certifications
Agency RoHS 2011/65/EU
Agency ISO 9001:2015
Agency China RoHS SJ/T 11364-2014
Classification Compliant by Exemption
Classification Designed, manufactured and/or distributed under this quality management system
Classification 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