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-off 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>
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<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>1.46</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>
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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>
<td>50 ohm</td>
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</table>

Electrical Specifications, BASTA*

<table>
<thead>
<tr>
<th></th>
<th></th>
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<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>CPxxxxxxxxxxxxxxxB3</td>
</tr>
<tr>
<td>B4</td>
<td>1695-2400</td>
<td>7-8</td>
<td>4</td>
<td>CPxxxxxxxxxxxxxxxB4</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
557.0 N @ 150 km/h

Wind Loading, lateral
125.2 lbf @ 150 km/h

175.0 N @ 150 km/h
Wind Loading, maximum
39.3 lbf @ 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
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.
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