4-port multibeam antenna, 4x 1695–2400 MHz, 2x 38° HPBW, 2x RET

- 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

General Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna Type</td>
<td>Multibeam</td>
</tr>
<tr>
<td>Band</td>
<td>Single band</td>
</tr>
<tr>
<td>Color</td>
<td>Light gray</td>
</tr>
<tr>
<td>Grounding Type</td>
<td>RF connector inner conductor and body grounded to reflector and mounting bracket</td>
</tr>
<tr>
<td>Performance Note</td>
<td>Outdoor usage</td>
</tr>
<tr>
<td>Radome Material</td>
<td>Fiberglass, UV resistant</td>
</tr>
<tr>
<td>Radiator Material</td>
<td>Low loss circuit board</td>
</tr>
<tr>
<td>Reflector Material</td>
<td>Aluminum</td>
</tr>
<tr>
<td>RF Connector Interface</td>
<td>4.3-10 Female</td>
</tr>
<tr>
<td>RF Connector Location</td>
<td>Bottom</td>
</tr>
<tr>
<td>RF Connector Quantity, high band</td>
<td>4</td>
</tr>
<tr>
<td>RF Connector Quantity, total</td>
<td>4</td>
</tr>
</tbody>
</table>

Remote Electrical Tilt (RET) Information, General

| RET Interface          | 8-pin DIN Female | 8-pin DIN Male |
| RET Interface, quantity | 2 female | 2 male |

Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>350 mm</td>
</tr>
<tr>
<td>Length</td>
<td>1400 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>208 mm</td>
</tr>
</tbody>
</table>
Array Layout

<table>
<thead>
<tr>
<th>Array</th>
<th>Freq (MHz)</th>
<th>Conn(s)</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>
</tbody>
</table>

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

Electrical Specifications

Impedance 50 ohm
Operating Frequency Band 1695 – 2400 MHz
Polarization ±45°

Remote Electrical Tilt (RET) Information, Electrical

Protocol 3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum 2 W
Power Consumption, normal conditions, maximum 13 W
Input Voltage 10–30 Vdc
Internal RET High band (2)

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>19.6</td>
<td>19.9</td>
<td>19.1</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>35.8</td>
<td>34</td>
<td>30</td>
</tr>
<tr>
<td>Beamwidth, Vertical, degrees</td>
<td>7.5</td>
<td>7</td>
<td>6.5</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>20</td>
<td>20</td>
<td>19</td>
<td>18</td>
</tr>
</tbody>
</table>
### Front-to-Back Ratio at 180°, dB
- 1695–1880 MHz: 34 dB
- 1850–1990 MHz: 37 dB
- 1920–2180 MHz: 37 dB
- 2300–2400 MHz: 30 dB

### Isolation, Cross Polarization, dB
- 1695–1880 MHz: 28 dB
- 1850–1990 MHz: 28 dB
- 1920–2180 MHz: 28 dB
- 2300–2400 MHz: 28 dB

### Isolation, Inter-band, dB
- 1695–1880 MHz: 16 dB
- 1850–1990 MHz: 16 dB
- 1920–2180 MHz: 16 dB
- 2300–2400 MHz: 16 dB

### VSWR | Return loss, dB
- 1695–1880 MHz: 1.5 dB | 14.0 dB
- 1850–1990 MHz: 1.5 dB | 14.0 dB
- 1920–2180 MHz: 1.5 dB | 14.0 dB
- 2300–2400 MHz: 1.5 dB | 14.0 dB

### PIM, 3rd Order, 2 x 20 W, dBC
- 1695–1880 MHz: -150 dBc
- 1850–1990 MHz: -150 dBc
- 1920–2180 MHz: -150 dBc
- 2300–2400 MHz: -150 dBc

### Input Power per Port, maximum, watts
- 1695–1880 MHz: 250 watts
- 1850–1990 MHz: 250 watts
- 1920–2180 MHz: 250 watts
- 2300–2400 MHz: 250 watts

### Electrical Specifications, BASTA

#### Frequency Band, MHz
- 1695–1880 MHz
- 1850–1990 MHz
- 1920–2180 MHz
- 2300–2400 MHz

#### Gain by all Beam Tilts, average, dBi
- 1695–1880 MHz: 18.7 dBi
- 1850–1990 MHz: 19.3 dBi
- 1920–2180 MHz: 19.6 dBi
- 2300–2400 MHz: 18.7 dBi

#### Gain by all Beam Tilts Tolerance, dB
- 1695–1880 MHz: ±0.5 dB
- 1850–1990 MHz: ±0.4 dB
- 1920–2180 MHz: ±0.6 dB
- 2300–2400 MHz: ±0.6 dB

#### Gain by Beam Tilt, average, dBi
- 2 °: 18.6 dBi
- 7 °: 19.1 dBi
- 12 °: 19.6 dBi

#### Beamwidth, Horizontal Tolerance, degrees
- ±1.3 degrees

#### Beamwidth, Vertical Tolerance, degrees
- ±0.4 degrees

#### USLS, beampeak to 20° above beampeak, dBi
- 1695–1880 MHz: 14 dBi
- 1850–1990 MHz: 15 dBi
- 1920–2180 MHz: 15 dBi
- 2300–2400 MHz: 15 dBi

#### Front-to-Back Total Power at 180° ± 30°, dB
- 1695–1880 MHz: 28 dB
- 1850–1990 MHz: 29 dB
- 1920–2180 MHz: 27 dB
- 2300–2400 MHz: 24 dB

#### CPR at Boresight, dB
- 1695–1880 MHz: 23 dB
- 1850–1990 MHz: 24 dB
- 1920–2180 MHz: 19 dB
- 2300–2400 MHz: 13 dB

### Mechanical Specifications

#### Wind Loading at Velocity, frontal
- 221.0 N @ 150 km/h | 49.7 lbf @ 150 km/h

#### Wind Loading at Velocity, lateral
- 185.0 N @ 150 km/h | 41.6 lbf @ 150 km/h

#### Wind Loading at Velocity, maximum
- 105.4 lbf @ 150 km/h | 469.0 N @ 150 km/h

#### Wind Loading at Velocity, rear
- 234.0 N @ 150 km/h | 52.6 lbf @ 150 km/h

#### Wind Speed, maximum
- 241 km/h | 149.75 mph

### Packaging and Weights

#### Width, packed
- 447 mm | 17.598 in

#### Depth, packed
- 354 mm | 13.937 in

#### Length, packed
- 1544 mm | 60.787 in

#### Net Weight, without mounting kit
- 17.6 kg | 38.801 lb

#### Weight, gross
- 30 kg | 66.139 lb
### Regulatory Compliance/Certifications

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>Compliant with the relevant CE product directives</td>
</tr>
<tr>
<td>CHINA-ROHS</td>
<td>Above maximum concentration value</td>
</tr>
<tr>
<td>ISO 9001:2015</td>
<td>Designed, manufactured and/or distributed under this quality management system</td>
</tr>
<tr>
<td>ROHS</td>
<td>Compliant/Exempted</td>
</tr>
</tbody>
</table>

### 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.