

10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100-4000 MHz, 55° HPBW, 2x RETs.

- Utilizes Pattern Shaping Technology to reduce cell overlap and maximize SINR (Signal to Interference and Noise Ratio)
- Superior SPR (Sector Power Ratio) for best-in-class data throughput rates
- Excellent pattern overlay across all bands
- Low band and mid band performance mirrors performance of the equivalent hex port antenna
- Internal SBTs on low and mid band allow remote RET control from the radio over the RF jumper cable
- One LB RET and one MB RET. Both mid band arrays are controlled by one RET to ensure same tilt level for best 4x4 MIMO performance
- Use optional BSAMNT-SBS-2-2 for side-by-side mounting of two hex and/or ten port 55° antennas

#### General Specifications

Band

Antenna Type Sector

Color Light Gray (RAL 7035)

**Grounding Type**RF connector inner conductor and body grounded to reflector and mounting

bracket

Multiband

Performance Note Outdoor usage

**Radome Material** Fiberglass, UV resistant

Radiator Material Low loss circuit board

**Reflector Material** Aluminum **RF Connector Interface** 4.3-10 Female

RF Connector Location Bottom

RF Connector Quantity, high band 4

RF Connector Quantity, mid band 4

RF Connector Quantity, low band 2

RF Connector Quantity, total 10

#### Remote Electrical Tilt (RET) Information

**RET Hardware** CommRET v2

**RET Interface, quantity** 2 female | 2 male

Input Voltage 10-30 Vdc

**COMMSCOPE®** 

Internal Bias Tee Port 1 | Port 3

Internal RET Low band (1) | Mid band (1)

Power Consumption, active state, maximum 10 W Power Consumption, idle state, maximum 2 W

**Protocol** 3GPP/AISG 2.0 (Single RET)

**Dimensions** 

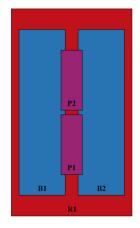
 Width
 395 mm | 15.551 in

 Depth
 228 mm | 8.976 in

 Length
 2438 mm | 95.984 in

 Net Weight, antenna only
 35.4 kg | 78.044 lb

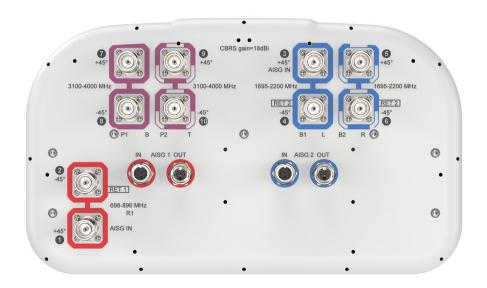
#### Array Layout



| Array ID | Frequency (MHz) | RF Connector | RET<br>(SRET) | AISG No. | AISG RET UID        |  |
|----------|-----------------|--------------|---------------|----------|---------------------|--|
| R1       | 698-896         | 1 - 2        | 1             | AISG1    | CPxxxxxxxxxxxxxxxR1 |  |
| B1       | 1695-2200       | 3 - 4        | 2             | AISG2    | CPxxxxxxxxxxxxxB1   |  |
| B2       | 1695-2200       | 5 - 6        | 2             | AISGZ    | CPXXXXXXXXXXXXXX    |  |
| P1       | 3100-4000       | 7 - 8        | NI/A          | NIA      | NI/A                |  |
| P2       | 3100-4000       | 9 - 10       | N/A           | NA       | N/A                 |  |

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

## Port Configuration



### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2200 MHz | 3100 – 4000 MHz | 698 – 896 MHz

Polarization ±45°

**Total Input Power, maximum** 1,000 W @ 50 °C

## **Electrical Specifications**

|                        | R1      | R1      | B1,B2     | B1,B2     | B1,B2     | P1,P2     | P1,P2     | P1,P2     |
|------------------------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Frequency Band, MHz    | 698-806 | 806-896 | 1695-1880 | 1850-1990 | 1920-2200 | 3100-3550 | 3550-3700 | 3700-4000 |
| RF Port                | 1,2     | 1,2     | 3,4,5,6   | 3,4,5,6   | 3,4,5,6   | 7,8,9,10  | 7,8,9,10  | 7,8,9,10  |
| Gain, dBi              | 16.2    | 16.1    | 18        | 18.2      | 18.5      | 17.7      | 17.6      | 17.4      |
| Beamwidth, Horizontal, | 57      | 54      | 56        | 59        | 57        | 56        | 62        | 52        |

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| degrees   |            |            |            |            |            |            |            |            |
|---|------------|------------|------------|------------|------------|------------|------------|------------|
| Beamwidth, Vertical, degrees                    | 9.3        | 8.1        | 5.6        | 5.2        | 4.8        | 5.9        | 5.3        | 5.2        |
| Beam Tilt, degrees                              | 0-11       | 0-11       | 0-7        | 0-7        | 0-7        | 4          | 4          | 4          |
| USLS (First Lobe), dB                           | 15         | 16         | 18         | 19         | 19         | 19         | 21         | 15         |
| Front-to-Back Ratio at 180°,<br>dB              | 26         | 30         | 31         | 33         | 31         | 29         | 26         | 24         |
| Isolation, Cross Polarization,<br>dB            | 25         | 25         | 25         | 25         | 25         | 25         | 25         | 25         |
| Isolation, Inter-band, dB                       | 25         | 25         | 25         | 25         | 25         | 30         | 30         | 30         |
| VSWR   Return loss, dB                          | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc                   | 153        | 153        | 153        | 153        | 153        | 145        | 145        | 145        |
| Input Power per Port at 50°C,<br>maximum, watts | 250        | 250        | 200        | 200        | 200        | 100        | 100        | 100        |

## Electrical Specifications, BASTA

| Frequency Band, MHz                         | 698-806 | 806-896 | 1695-188 | 0 1850-199 | 0 1920-220 | 0 3100-355 | 0 3550-370 | 0 3700-4000 |
|---|---------|---------|----------|------------|------------|------------|------------|-------------|
| Gain by all Beam Tilts,<br>average, dBi     | 15.8    | 15.8    | 17.5     | 18         | 18.2       | 17.5       | 17.3       | 17.1        |
| Gain by all Beam Tilts<br>Tolerance, dB     | ±0.7    | ±0.5    | ±0.8     | ±0.3       | ±0.4       | ±0.6       | ±0.4       | ±0.6        |
| Beamwidth, Horizontal<br>Tolerance, degrees | ±3      | ±2      | ±4       | ±4         | ±6         | ±6         | ±4         | ±10         |
| Beamwidth, Vertical<br>Tolerance, degrees   | ±1.3    | ±0.5    | ±0.4     | ±0.2       | ±0.4       | ±0.5       | ±0.3       | ±0.3        |
| USLS, beampeak to 20° above beampeak, dB    | 13      | 15      | 14       | 16         | 16         | 12         | 13         | 14          |
| Front-to-Back Total Power at 180° ± 30°, dB | 23      | 27      | 27       | 29         | 29         | 24         | 22         | 21          |
| CPR at Boresight, dB                        | 21      | 26      | 17       | 24         | 27         | 14         | 15         | 15          |

## Mechanical Specifications

| Effective Projective Area (EPA), frontal | 0.36 m <sup>2</sup>   3.875 ft <sup>2</sup> |
|--|---|
| Effective Projective Area (EPA), lateral | 0.32 m²   3.444 ft²                         |
| Wind Loading @ Velocity, frontal         | 382.0 N @ 150 km/h (85.9 lbf @ 150 km/h)    |
| Wind Loading @ Velocity, lateral         | 346.0 N @ 150 km/h (77.8 lbf @ 150 km/h)    |
| Wind Loading @ Velocity, maximum         | 768.0 N @ 150 km/h (172.7 lbf @ 150 km/h)   |
| Wind Loading @ Velocity, rear            | 437.0 N @ 150 km/h (98.2 lbf @ 150 km/h)    |
| Wind Speed, maximum                      | 241 km/h (150 mph)                          |

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#### Packaging and Weights

 Width, packed
 505 mm | 19.882 in

 Depth, packed
 386 mm | 15.197 in

 Length, packed
 2570 mm | 101.181 in

 Weight, gross
 51 kg | 112.436 lb

### Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Above maximum concentration value

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

ROHS Compliant/Exempted UK-ROHS Compliant/Exempted



#### 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



## 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.

#### **Product Classification**

**Product Type** Downtilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

**Dimensions** 

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net6.2 kg | 13.669 lb

Material Specifications

Material Type Galvanized steel

### Packaging and Weights

Included Brackets | Hardware

Packaging quantity

**Weight, gross** 6.4 kg | 14.11 lb

#### Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| CE            | Compliant with the relevant CE product directives                              |
| CHINA-ROHS    | Below maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC    | Compliant as per SVHC revision on www.commscope.com/ProductCompliance          |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |
|               |  |





