

22-port sector antenna, 2x 694-862 (R1), 2x 880-960 (R2), 2x 1427-2690 (Y2), 4x 1695-2180 (B1-B2), 4x 2490-2690 (Y1 & Y3) MHz, 65° 8x 3300-3800 (P1) HPBW, 7X RET. Y1 & Y3 share common RET.

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Retractable tilt indicator rods
- Two cluster connectors for the S4 beam-forming array, including 2 MQ connectors MQ4/MQ5

### General Specifications

| Antenna Type                     | Sector   |
|----------------------------------|--|
| Band                             | Multiband  |
| Color                            | Light Gray (RAL 7035)  |
| Grounding Type                   | RF connector inner conductor and body grounded to reflector and mounting bracket |
| 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   MQ4   MQ5  |
| RF Connector Location            | Bottom   |
| RF Connector Quantity, high band | 8  |
| RF Connector Quantity, mid band  | 10   |
| RF Connector Quantity, low band  | 4  |
| RF Connector Quantity, total     | 22   |

#### Remote Electrical Tilt (RET) Information

| RET Hardware                             | CommRET v2                                  |
|--|---|
| RET Interface                            | 8-pin DIN Female   8-pin DIN Male           |
| RET Interface, quantity                  | 2 female   2 male                           |
| Input Voltage                            | 10-30 Vdc                                   |
| Internal RET                             | High band (1)   Low band (2)   Mid band (4) |
| Power Consumption, active state, maximum | 8 W   |
| Power Consumption, idle state, maximum   | 1 W   |

Page 1 of 7



| Power Consumption, normal conditions, maximum | 8 W                        |
|---|----------------------------|
| Protocol                                      | 3GPP/AISG 2.0 (Single RET) |
| Dimensions                                    |                            |
| Width   | 395 mm   15.551 in         |
| Depth   | 228 mm   8.976 in          |
| Length  | 2100 mm   82.677 in        |
| Net Weight, without mounting kit              | 42.9 kg   94.578 lb        |

#### Array Layout

Y1

B1

**R2** 

Y2

| y | out |       |            |       |               |   |
|---|-----|-------|------------|-------|---------------|---|
|   | Y3  | Array | Freq (MHz) | Conns | RET<br>(SRET) | AISG RET UID                            |
|   |     | R1    | 694-862    | 1-2   | 1             | CPxxxxxxxxxxxxR1                        |
|   |     | R2    | 880-960    | 3-4   | 2             | CPxxxxxxxxxxxxR2                        |
|   |     | B1    | 1695-2180  | 5-6   | 3             | CPxxxxxxxxxxxB1                         |
|   | B2  | B2    | 1695-2180  | 7-8   | 4             | CPxxxxxxxxxxxB2                         |
| ١ |     | ¥1    | 2490-2690  | 9-10  | -             | CD: W1                                  |
|   |     | ¥3    | 2490-2690  | 13-14 | 5             | CPxxxxxxxxxxxxXXXXXXXXXXY1              |
|   |     | Y2    | 1427-2690  | 11-12 | 6             | CPxxxxxxxxxxxXXXXXXXXXXXXXXXXXXXXXXXXXX |
|   |     | P1    | 3300-3800  | 15-22 | 7             | CPxxxxxxxxxxxxxP1                       |
|   |     |       |            |       |               |   |

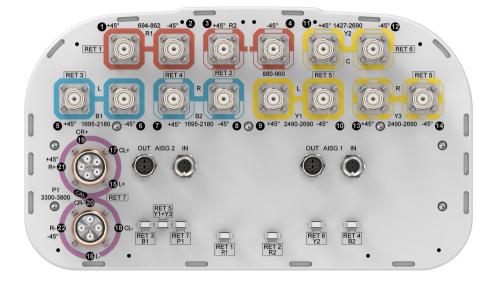


(Sizes of colored boxes are not true depictions of array sizes)

### Port Configuration

Page 2 of 7





### **Electrical Specifications**

| Impedance                  | 50 ohm   |
|----------------------------|--|
| Operating Frequency Band   | 1427 – 2690 MHz   1695 – 2180 MHz   2490 – 2690 MHz   3300<br>– 3800 MHz   694 – 862 MHz   880 – 960 MHz |
| Polarization               | ±45°   |
| Total Input Power, maximum | 900 W @ 50 °C  |

### **Electrical Specifications**

| Frequency Band, MHz                                  | 694-862 | 880-960 | 1695-218 | 0 2490-269 | 0 1427-151 | 8 1695-220 | 0 2300-269 | 0 3300-3800 |
|--|---------|---------|----------|------------|------------|------------|------------|-------------|
| Gain, dBi  | 14.7    | 15      | 16.5     | 16.7       | 14.6       | 16.3       | 17         | 15.1        |
| Beamwidth, Horizontal,<br>degrees                    | 65      | 64      | 66       | 60         | 70         | 63         | 56         | 91          |
| Beamwidth, Vertical, degrees                         | 10.5    | 8.9     | 7.1      | 5.6        | 9.3        | 7.5        | 5.8        | 7.1         |
| Beam Tilt, degrees                                   | 2-12    | 2-12    | 2-12     | 2-12       | 2-12       | 2-12       | 2-12       | 2-12        |
| USLS (First Lobe), dB                                | 17      | 22      | 21       | 18         | 19         | 16         | 21         | 15          |
| Front-to-Back Ratio at 180°,<br>dB                   | 35      | 33      | 32       | 30         | 32         | 32         | 34         | 27          |
| Coupling level, Amp, Antenna<br>port to Cal port, dB |         |         |          |            |            |            |            | 26          |
| Coupling level, max Amp $\Delta$ ,                   |         |         |          |            |            |            |            | ±2          |

Page 3 of 7



| Antenna port to Cal port, dB                                  |            |            |            |            |            |            |            |            |
|---|------------|------------|------------|------------|------------|------------|------------|------------|
| Coupler, max Amp Δ, Antenna<br>port to Cal port, dB           |            |            |            |            |            |            |            | 0.9        |
| Coupler, max Phase Δ,<br>Antenna port to Cal port,<br>degrees |            |            |            |            |            |            |            | 7          |
| Isolation, Cross Polarization,<br>dB                          | 28         | 28         | 28         | 28         | 28         | 27         | 27         | 25         |
| Isolation, Inter-band, dB                                     | 28         | 28         | 28         | 28         | 28         | 28         | 28         | 19         |
| 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                                 | -150       | -150       | -150       | -150       | -150       | -150       | -150       | -145       |
| Input Power per Port at 50°C,<br>maximum, watts               | 300        | 300        | 250        | 200        | 200        | 250        | 250        | 75         |

### Electrical Specifications, BASTA

| Frequency Band, MHz                         | 694-862 | 880-960 | 1695-2180 | 0 2490-2690 | 0 1427-151 | 8 1695-220 | 0 2300-2690 | 0 3300-3800 |
|---|---------|---------|-----------|-------------|------------|------------|-------------|-------------|
| Gain by all Beam Tilts,<br>average, dBi     | 14.5    | 14.7    | 16        | 16.1        | 14.4       | 15.4       | 16.6        | 14.5        |
| Gain by all Beam Tilts<br>Tolerance, dB     | ±0.3    | ±0.4    | ±0.8      | ±0.7        | ±0.4       | ±1.3       | ±0.7        | ±0.6        |
| Beamwidth, Horizontal<br>Tolerance, degrees | ±2.5    | ±1.9    | ±5.4      | ±5.8        | ±4.2       | ±5.9       | ±5.9        | ±14.5       |
| Beamwidth, Vertical<br>Tolerance, degrees   | ±1.1    | ±0.5    | ±0.7      | ±0.2        | ±0.5       | ±1         | ±0.6        | ±0.6        |
| USLS, beampeak to 20° above<br>beampeak, dB | 17      | 18      | 15        | 14          | 15         | 15         | 16          | 15          |
| Front-to-Back Total Power at 180° ± 30°, dB | 26      | 24      | 24        | 24          | 26         | 28         | 29          | 21          |
| CPR at Boresight, dB                        | 19      | 16      | 17        | 18          | 14         | 22         | 24          | 15          |
| CPR at Sector, dB                           | 12      | 8       | 7         | 10          | 8          | 8          | 6           | 9           |

### Electrical Specifications, Broadcast 65°

| Frequency Band, MHz               | 3300-3800 |
|-----------------------------------|-----------|
| Gain, dBi                         | 16.2      |
| Beamwidth, Horizontal,<br>degrees | 60        |
| Beamwidth, Vertical, degrees      | 7.1       |
| USLS (First Lobe), dB             | 16        |

### Electrical Specifications, Service Beam

Page 4 of 7



| Frequency Band, MHz  | 3300-3800 |
|--|-----------|
| Steered 0° Gain, dBi                                       | 19.8      |
| Steered 0° Beamwidth,<br>Horizontal, degrees               | 25        |
| Steered 0° Front-to-Back<br>Total Power at 180° ± 30°, dB  | 28        |
| Steered 0° Horizontal<br>Sidelobe, dB                      | 12        |
| Steered 30° Gain, dBi                                      | 19.4      |
| Steered 30° Beamwidth,<br>Horizontal, degrees              | 25        |
| Steered 30° Front-to-Back<br>Total Power at 180° ± 30°, dB | 27        |
| Steered 30° Horizontal<br>Sidelobe, dB                     | 10        |

### Electrical Specifications, Soft Split

| Frequency Band, MHz                            | 3300-3800 |
|--|-----------|
| Gain, dBi                                      | 19.2      |
| Beamwidth, Horizontal,<br>degrees              | 29        |
| CPR at Beampeak, dB                            | 17        |
| Front-to-Back Total Power at<br>180° ± 30°, dB | 27        |
| Horizontal Sidelobe, dB                        | 17        |

### Mechanical Specifications

| Wind Loading @ Velocity, frontal | 427.0 N @ 150 km/h (96.0 lbf @ 150 km/h)  |
|----------------------------------|---|
| Wind Loading @ Velocity, lateral | 312.0 N @ 150 km/h (70.1 lbf @ 150 km/h)  |
| Wind Loading @ Velocity, maximum | 730.0 N @ 150 km/h (164.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 439.0 N @ 150 km/h (98.7 lbf @ 150 km/h)  |
| Wind Speed, maximum              | 241 km/h (150 mph)                        |

#### Packaging and Weights

| Width, packed  | 505 mm   19.882 in   |
|----------------|----------------------|
| Depth, packed  | 386 mm   15.197 in   |
| Length, packed | 2233 mm   87.913 in  |
| Weight, gross  | 58.6 kg   129.191 lb |

Page 5 of 7

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 15, 2024

**COMMSCOPE**°

#### Weight, net

42.9 kg | 94.578 lb

### Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| 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  |
|               |  |

#### Included Products

BSAMNT-4

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

Page 6 of 7



### BSAMNT-4



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                |                       |
| Application                           | Outdoor               |
| Color                                 | Silver                |
| Dimensions                            |                       |
| Compatible Diameter, maximum          | 115 mm   4.528 in     |
| Compatible Diameter, minimum          | 60 mm   2.362 in      |
| Weight, net                           | 6.5 kg   14.33 lb     |
| Material Specifications               |                       |
| Material Type                         | Galvanized steel      |
|                                       |                       |
| Packaging and Weights                 |                       |
| Included                              | Brackets   Hardware   |
| Packaging quantity                    | 1                     |
| Pequilatory Compliance/Certifications |                       |

#### Regulatory Compliance/Certifications

| 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  |



Page 7 of 7

