

16-port sector antenna, 4x 694-960, 4x 1427-2690, and 8x 1695-2690 MHz 65° HPBW, 8 x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Retractable tilt indicator rods
- Antenna shape optimized for wind load reduction

### General Specifications

**Band** 

Antenna Type Sector

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

bracket

Multiband

Performance NoteOutdoor usageRF Connector Interface4.3-10 Female

**RF Connector Location** Bottom

RF Connector Quantity, high band 0
RF Connector Quantity, mid band 12
RF Connector Quantity, low band 4
RF Connector Quantity, total 16

#### 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 Low band (2) | Mid band (6)

Power Consumption, active state, maximum 8 WPower Consumption, idle state, maximum 1 W

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

**Dimensions** 

 Width
 430 mm | 16.929 in

 Depth
 197 mm | 7.756 in

COMMSC PE°

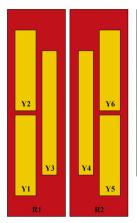
Length

2769 mm | 109.016 in

Net Weight, antenna only

44.6 kg | 98.326 lb

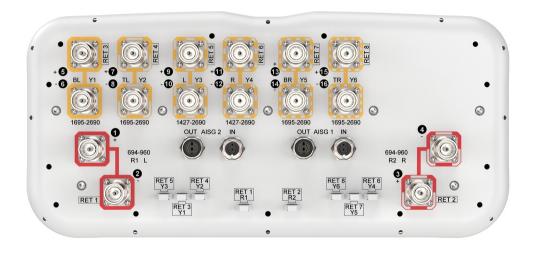
## Array Layout



| Array ID | Frequency (MHz) | RF Connector | RET<br>(SRET) | AISG RET UID       |
|----------|-----------------|--------------|---------------|--------------------|
| R1       | 694-960         | 1 - 2        | 1             | CPxxxxxxxxxxxxxxR1 |
| R2       | 694-960         | 3 - 4        | 2             | CPxxxxxxxxxxxxxR2  |
| Y1       | 1695-2690       | 5 - 6        | 3             | CPxxxxxxxxxxxxxY1  |
| Y2       | 1695-2690       | 7 - 8        | 4             | CPxxxxxxxxxxxxxY2  |
| Y3       | 1427-2690       | 9 - 10       | 5             | CPxxxxxxxxxxxxxY3  |
| Y4       | 1427-2690       | 11 - 12      | 6             | CPxxxxxxxxxxxxxY4  |
| Y5       | 1695-2690       | 13 - 14      | 7             | CPxxxxxxxxxxxxxY5  |
| Y6       | 1695-2690       | 15 - 16      | 8             | CPxxxxxxxxxxxxY6   |

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

## Port Configuration



### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1427 – 2690 MHz | 1695 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 1,200 W @ 50 °C

### **Electrical Specifications**

|  | R1,R2      | R1,R2      | R1,R2      | Y3,Y4      | Y3,Y4      | Y3,Y4      | Y3,Y4      | Y3,Y4       |
|--|------------|------------|------------|------------|------------|------------|------------|-------------|
| Frequency Band, MHz                          | 698-806    | 790-894    | 890-960    | 1427-1518  | 1695-199   | 5 1920-230 | 0 2300–250 | 0 2490-2690 |
| RF Port                                      | 1-4        | 1-4        | 1-4        | 9-12       | 9-12       | 9-12       | 9-12       | 9-12        |
| Gain at Mid Tilt, dBi                        | 15.5       | 16.1       | 16.4       | 15.4       | 16.2       | 17.3       | 18.2       | 18.3        |
| Beamwidth, Horizontal,<br>degrees            | 61         | 55         | 53         | 64         | 68         | 68         | 61         | 58          |
| Beamwidth, Vertical, degrees                 | 7.7        | 6.9        | 6.4        | 6.9        | 5.7        | 5.1        | 4.5        | 4.3         |
| Beam Tilt, degrees                           | 2-12       | 2-12       | 2-12       | 2-12       | 2-12       | 2-12       | 2-12       | 2-12        |
| USLS (First Lobe), dB                        | 15         | 15         | 16         | 17         | 16         | 17         | 18         | 18          |
| Front-to-Back Ratio at 180°,<br>dB           | 35         | 35         | 32         | 32         | 32         | 32         | 32         | 33          |
| Front-to-Back Total Power at 180° ± 30°, dB  | 23         | 23         | 23         | 24         | 26         | 26         | 27         | 27          |
| Isolation, Cross Polarization, dB            | 27         | 27         | 27         | 26         | 26         | 26         | 26         | 26          |
| Isolation, Inter-band, dB                    | 27         | 27         | 27         | 26         | 26         | 26         | 26         | 26          |
| 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       | -153       | -153       | -153        |
| Input Power per Port at 50°C, maximum, watts | 300        | 300        | 300        | 250        | 250        | 250        | 200        | 200         |

### **Electrical Specifications**

#### Y1,Y2,Y5,Y6Y1,Y2,Y5,Y6Y1,Y2,Y5,Y6Y1,Y2,Y5,Y6

| Frequency Band, MHz               | 1695-1995 | 1920-2300 | 2300-2500 | 2490-2690 |
|-----------------------------------|-----------|-----------|-----------|-----------|
| RF Port                           | 5-8,13-16 | 5-8,13-16 | 5-8,13-16 | 5-8,13-16 |
| Gain at Mid Tilt, dBi             | 16.1      | 17.2      | 17.9      | 17.7      |
| Beamwidth, Horizontal,<br>degrees | 69        | 64        | 62        | 61        |
| Beamwidth, Vertical, degrees      | 6.4       | 5.6       | 5         | 4.8       |

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| Beam Tilt, degrees                           | 2-12       | 2-12       | 2-12       | 2-12       |
|--|------------|------------|------------|------------|
| USLS (First Lobe), dB                        | 15         | 15         | 16         | 17         |
| Front-to-Back Ratio at 180°,<br>dB           | 32         | 31         | 32         | 33         |
| Front-to-Back Total Power at 180° ± 30°, dB  | 26         | 25         | 26         | 26         |
| Isolation, Cross Polarization, dB            | 27         | 27         | 27         | 27         |
| Isolation, Inter-band, dB                    | 27         | 27         | 27         | 27         |
| VSWR   Return loss, dB                       | 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       |
| Input Power per Port at 50°C, maximum, watts | 250        | 250        | 200        | 200        |

#### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)

 Wind Speed, maximum
 241 km/h (150 mph)

### Packaging and Weights

 Width, packed
 511 mm | 20.118 in

 Depth, packed
 318 mm | 12.52 in

 Length, packed
 2890 mm | 113.78 in

 Weight, gross
 64.3 kg | 141.757 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.

BSAMNT-M4 – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round

members. Kit contains one scissor bracket set.

#### \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance



## 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

ApplicationOutdoorColorSilver

**Dimensions** 

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net6.5 kg | 14.33 lb

Material Specifications

Material Type Galvanized steel

### Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

#### 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  |
|               |  |



## BSAMNT-M4



Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor 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, net4.6 kg | 10.141 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

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



