

16-port, low band diplexed antenna,  $2 \times 698-728$  MHz,  $2 \times 758-798$  MHz,  $2 \times 698-798$  MHz,  $2 \times 824-894$  MHz and  $8 \times 1695-2360$  MHz,  $65^{\circ}$  HPBW,  $6 \times 824-894$  MHz and  $8 \times 1695-2360$  MHz,

- Features broadband Low Band (698-894 MHz) and Mid Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for 700 and 850 MHz, AWS, PCS and WCS applications
- Both Low Band arrays are diplexed for independent tilt, with one array providing two ports of B29 and two ports of B14 and the other array providing two ports of B14 and two ports of B5
- Excellent wind loading characteristics
- Optimized SPR performance across all operating bands

## 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 MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector Location Bottom
RF Connector Quantity, mid band 8
RF Connector Quantity, low band 8

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 (4) | Mid band (2)

Power Consumption, active state, maximum 8 W

Power Consumption, idle state, maximum 1 W

**Protocol** 3GPP/AISG 2.0 (Multi-RET)

**Dimensions** 

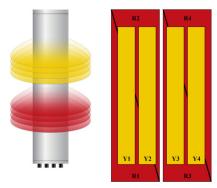
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2438 mm | 95.984 in

 Net Weight, antenna only
 57.2 kg | 126.104 lb

## Array Layout



| Array ID | Frequency<br>(MHz) | RF Connector | HPBW | RET<br>(MRET) | AISG No. | AISG RET UID                           |  |
|----------|--------------------|--------------|------|---------------|----------|--|--|
| R1       | 698-728            | 1 - 2        | 65°  | 1             | AISG1    | CPxxxxxxxxxxxMM.1                      |  |
| R2       | 758-798            | 3 - 4        | 65°  | 2             | AISG1    | CPxxxxxxxxxxxxMM.2                     |  |
| R3       | 698-798            | 5 - 6        | 65°  | 3             | AISG1    | CPxxxxxxxxxxxMM.3                      |  |
| R4       | 824-894            | 7 - 8        | 65°  | 4             | AISG1    | CPxxxxxxxxxxxMM.                       |  |
| Y1       | 1695-2360          | 9 - 10       | 65°  | 5             | AISG1    | CPxxxxxxxxxxxMM.5                      |  |
| Y2       | 1695-2360          | 11 - 12      | 65°  | 3             | AISGI    | CPXXXXXXXXXXXXIVIII.5                  |  |
| Y3       | 1695-2360          | 13 - 14      | 65°  | 6             | AISG1    | CD:::::::::::::::::::::::::::::::::::: |  |
| Y4       | 1695-2360          | 15 - 16      | 65°  | ٥             | AISGT    | CPxxxxxxxxxxxXMM.6                     |  |

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

# Port Configuration



## **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2360 MHz | 698 – 798 MHz | 824 – 894 MHz

Polarization ±45°

**Total Input Power, maximum** 1,280 W @ 50 °C

## **Electrical Specifications**

|                                    | R1-R3   | R4      | Y1-Y4     | Y1-Y4     | Y1-Y4     | Y1-Y4     |
|------------------------------------|---------|---------|-----------|-----------|-----------|-----------|
| Frequency Band, MHz                | 698-798 | 824-894 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2360 |
| RF Port                            | 1-6     | 7,8     | 9-16      | 9-16      | 9-16      | 9-16      |
| Gain, dBi                          | 15.1    | 15.2    | 17.6      | 18.1      | 18.7      | 18.9      |
| Beamwidth, Horizontal, degrees     | 58      | 61      | 68        | 67        | 62        | 58        |
| Beamwidth, Vertical, degrees       | 9.3     | 8.1     | 5.7       | 5.3       | 5         | 4.5       |
| Beam Tilt, degrees                 | 0-10    | 0-10    | 0-10      | 0-10      | 0-10      | 0-10      |
| USLS (First Lobe), dB              | 17      | 17      | 18        | 17        | 19        | 21        |
| Front-to-Back Ratio at 180°,<br>dB | 32      | 30      | 35        | 34        | 34        | 36        |
| Front-to-Back Total Power at       | 23      | 24      | 27        | 27        | 26        | 27        |

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| 180° ± 30°, dB                               |            |            |            |            |            |            |
|--|------------|------------|------------|------------|------------|------------|
| Isolation, Cross Polarization, dB            | 25         | 25         | 25         | 25         | 25         | 25         |
| Isolation, Inter-band, dB                    | 25         | 25         | 25         | 25         | 25         | 25         |
| 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 |
| PIM, 3rd Order, 2 x 20 W, dBc                | -150       | -150       | -150       | -150       | -150       | -150       |
| Input Power per Port at 50°C, maximum, watts | 150        | 150        | 250        | 250        | 250        | 200        |

## Electrical Specifications, BASTA

| Frequency Band, MHz                         | 698-798 | 824-894 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2360 |
|---|---------|---------|-----------|-----------|-----------|-----------|
| Gain by all Beam Tilts,<br>average, dBi     | 14.8    | 14.9    | 17.1      | 17.8      | 18.3      | 18.7      |
| Gain by all Beam Tilts<br>Tolerance, dB     | ±0.3    | ±0.5    | ±0.6      | ±0.6      | ±0.6      | ±0.4      |
| Beamwidth, Horizontal<br>Tolerance, degrees | ±5      | ±6      | ±8        | ±8        | ±7        | ±4        |
| Beamwidth, Vertical<br>Tolerance, degrees   | ±0.6    | ±0.4    | ±0.3      | ±0.2      | ±0.3      | ±0.2      |
| USLS, beampeak to 20° above<br>beampeak, dB | 17      | 16      | 16        | 17        | 18        | 17        |
| CPR at Boresight, dB                        | 20      | 20      | 23        | 25        | 25        | 20        |
| CPR at Sector, dB                           | 10      | 10      | 8         | 8         | 6         | 8         |

## Mechanical Specifications

 Wind Loading @ Velocity, frontal
 865.0 N @ 150 km/h (194.5 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,037.0 N @ 150 km/h (233.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 595.0 N @ 150 km/h (133.8 lbf @ 150 km/h)

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

## Packaging and Weights

 Width, packed
 565 mm | 22.244 in

 Depth, packed
 309 mm | 12.165 in

 Length, packed
 2685 mm | 105.709 in

 Weight, gross
 77.2 kg | 170.197 lb

Regulatory Compliance/Certifications

#### Agency

#### Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



### 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.

BSAMNT-M – 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-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  |
|               |  |







## **BSAMNT-M**



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, net4.5 kg | 9.921 lb

Material Specifications

Material Type Galvanized steel

## Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

## Regulatory Compliance/Certifications

# AgencyClassificationCHINA-ROHSBelow maximum concentration valueISO 9001:2015Designed, manufactured and/or distributed under this quality management systemREACH-SVHCCompliant as per SVHC revision on www.commscope.com/ProductComplianceROHSCompliantUK-ROHSCompliant



