

16-port, low band diplexed antenna, $4 \times 698-728$ MHz, $4 \times 758-798$ MHz and $8 \times 1695-2360$ MHz, 65° HPBW, $6 \times RET$

- Excellent wind loading characteristics
- Optimized SPR performance across all operating bands
- Features broadband Low Band (698-798 MHz) and Mid Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for B29 and B14, AWS, PCS and WCS applications
- Both Low Band arrays are diplexed to provide independent tilt for B29 and B14

General Specifications

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

Grounding TypeRF 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 LocationBottom

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 (2) | Mid band (4)

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

Protocol 3GPP/AISG 2.0 (Multi-RET)

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Dimensions

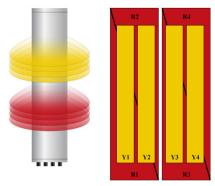
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2438 mm | 95.984 in

 Net Weight, antenna only
 57.4 kg | 126.545 lb

Array Layout



| Array ID | Frequency (MHz) | RF Connector | RET (MRET) | AISG No. | AISG RET UID | | |
|----------|-----------------|--------------|---------------|----------|--------------------|--|--|
| R1 | 698-728 | 1 - 2 | 1 | AICC1 | CD | | |
| R3 | 698-728 | 5 - 6 | | AISG1 | CPxxxxxxxxxxxxMM.1 | | |
| R2 | 758-798 | 3 - 4 | 2 | AISG1 | 60 | | |
| R4 | 758-798 | 7 - 8 | 2 | AISG1 | CPxxxxxxxxxxxMM.2 | | |
| Y1 | 1695-2360 | 9 - 10 | 3 | AISG1 | CPxxxxxxxxxxxMM.3 | | |
| Y2 | 1695-2360 | 11 - 12 | 4 | AISG1 | CPxxxxxxxxxxxxMM.4 | | |
| Y3 | 1695-2360 | 13 - 14 | 5 | AISG1 | CPxxxxxxxxxxxxMM.5 | | |
| Y4 | 1695-2360 | 15 - 16 | 6 | AISG1 | 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

Polarization ±45°

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

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Electrical Specifications

| | R1,R3 | R2,R4 | Y1-Y4 | Y1-Y4 | Y1-Y4 | Y1-Y4 |
|--|------------|------------|------------|------------|------------|------------|
| Frequency Band, MHz | 698-728 | 758-798 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2360 |
| RF Port | 1,2,5,6 | 3,4,7,8 | 9-16 | 9-16 | 9-16 | 9-16 |
| Gain, dBi | 14.7 | 15.1 | 17.4 | 18 | 18.6 | 18.7 |
| Beamwidth, Horizontal, degrees | 61 | 57 | 69 | 67 | 62 | 58 |
| Beamwidth, Vertical, degrees | 9.7 | 8.9 | 5.7 | 5.3 | 5 | 4.4 |
| Beam Tilt, degrees | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 |
| USLS (First Lobe), dB | 19 | 19 | 18 | 19 | 19 | 20 |
| Front-to-Back Ratio at 180°, dB | 33 | 31 | 35 | 36 | 34 | 36 |
| Front-to-Back Total Power at 180° ± 30°, dB | 22 | 23 | 27 | 27 | 26 | 28 |
| 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 | 698-728 | 758-798 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2360 |
|---|---------|---------|-----------|-----------|-----------|-----------|
| Gain by all Beam Tilts, average, dBi | 14.5 | 14.8 | 16.9 | 17.6 | 18.2 | 18.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.3 | ±0.7 | ±0.6 | ±0.7 | ±0.5 |
| Beamwidth, Horizontal Tolerance, degrees | ±6 | ±3 | ±8 | ±8 | ±7 | ±4 |
| Beamwidth, Vertical Tolerance, degrees | ±0.3 | ±0.4 | ±0.3 | ±0.3 | ±0.4 | ±0.3 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 17 | 15 | 17 | 17 | 17 |
| CPR at Boresight, dB | 21 | 22 | 21 | 23 | 23 | 21 |
| CPR at Sector, dB | 12 | 10 | 8 | 8 | 7 | 9 |

Mechanical Specifications

Wind Loading @ Velocity, frontal

865.0 N @ 150 km/h (194.5 lbf @ 150 km/h)

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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
 78.3 kg | 172.622 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 | $\label{thm:constraint} \mbox{Designed, manufactured and/or distributed under this quality management system}$ |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |
| | |

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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

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





