

16- Port sector antenna, 4x 698-896, 8x 1695-2360 and 4x 3550-3700MHz, 65° HPBW, 3x RETs and 3x SBTs

- Features broadband Low Band (698-896 MHz), Mid Band (1695-2360 MHz) and High Band (3550-3700 MHz) arrays for 4T4R (4X MIMO) capability for bands 5, 13, 25, 66 and 48. Also covers bands 12, 14, 29, and 30
- Perfect antenna to add 3.5GHz CBRS to macro sites
- Non-stacked high band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs
- Array configuration provides capability for 4T4R (4X MIMO) on Low Band, dual 4T4R (4X MIMO) on Mid Band and 4T4R (4X MIMO) on High Band)
- Excellent wind loading characteristics

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, high band 4
RF Connector Quantity, mid band 8
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 3 female | 3 male

Input Voltage 10-30 Vdc

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Internal Bias Tee Port 1 | Port 5 | Port 9

Internal RET Low band (1) | Mid band (2)

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

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

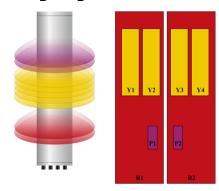
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2438 mm | 95.984 in

 Net Weight, antenna only
 46.4 kg | 102.294 lb

Array Layout



| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID | | |
|----------|-----------------|--------------|---------------|----------|--------------------|--|--|
| R1 | 698-896 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxxR1 | | |
| R2 | 698-896 | 3 - 4 | ' | AISGI | CPXXXXXXXXXXXXXXXX | | |
| Y1 | 1695-2360 | 5 - 6 | 2 | AISG2 | CPxxxxxxxxxxxxxY1 | | |
| Y2 | 1695-2360 | 7 - 8 | | AISG2 | CPXXXXXXXXXXXXXXX | | |
| Y3 | 1695-2360 | 9 - 10 | 3 | AISG3 | CPxxxxxxxxxxxxxx | | |
| Y4 | 1695-2360 | 11 - 12 | 3 | AISG3 | | | |
| P1 | 3550-3700 | 13 - 14 | NI/A | NA | NI/A | | |
| P2 | 3550-3700 | 15 - 16 | 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 – 2360 MHz | 3550 – 3700 MHz | 698 – 896 MHz

Polarization ±45°

Total Input Power, maximum 1,600 W @ 50 °C

Electrical Specifications

| Frequency Band, MHz | 698-806 | 806-896 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2360 | 3550-3700 |
|------------------------------------|---------|---------|-----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 15.5 | 16 | 17.1 | 17.6 | 18.2 | 18.4 | 14 |
| Beamwidth, Horizontal, degrees | 73 | 65 | 69 | 68 | 64 | 59 | 63 |
| Beamwidth, Vertical, degrees | 9.6 | 8.4 | 5.7 | 5.3 | 5 | 4.6 | 16.6 |
| Beam Tilt, degrees | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 | 0-10 | 8 |
| USLS (First Lobe), dB | 15 | 18 | 18 | 19 | 20 | 21 | 18 |
| Front-to-Back Ratio at 180°, dB | 31 | 31 | 31 | 31 | 32 | 33 | 33 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

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| VSWR Return loss, dB 1.5 | 5 14.0 1.5 | 5 14.0 1 | 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 -15 | 53 -1 | 153 - | -153 - | -153 - | -153 | -153 | -145 |
| Input Power per Port at 50°C, 30 maximum, watts | 00 30 | 00 3 | 300 | 250 | 250 | 200 | 100 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698-806 | 806-896 | 1695-1880 | 1850-1990 | 1920-2180 | 2300-2360 | 3550-3700 |
|---|---------|---------|-----------|-----------|-----------|-----------|-----------|
| Gain by all Beam Tilts, average, dBi | 15 | 15.7 | 16.6 | 17 | 17.5 | 18 | 13.7 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.4 | ±0.6 | ±0.6 | ±0.7 | ±0.5 | ±0.4 |
| Front-to-Back Total Power at 180° ± 30°, dB | 24 | 23 | 28 | 27 | 27 | 28 | 27 |
| CPR at Boresight, dB | 25 | 27 | 21 | 24 | 24 | 21 | 19 |
| CPR at Sector, dB | 15 | 10 | 10 | 9 | 8 | 6 | 3 |

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
 66.3 kg | 146.166 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.

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 1

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

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



COMMSC PE°