

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 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, 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

**COMMSCOPE®** 

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** 

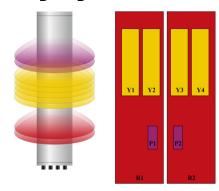
 Width
 498 mm | 19.606 in

 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		AISC1	CD::::::::::::::::::::::::::::::::::::		
R2	698-896	3 - 4	1	AISG1	CPxxxxxxxxxxxxxxR1		
Y1	1695-2360	5 - 6	2	AISG2	CD		
Y2	1695-2360	7 - 8		AISG2	CPxxxxxxxxxxxxxY1		
Y3	1695-2360	9 - 10	3	AISG3	CPxxxxxxxxxxxxxx		
Y4	1695-2360	11 - 12	3		CPXXXXXXXXXXXXXXXXX		
P1	3550-3700	13 - 14	NI/A	NA	N/A		
P2	3550-3700	15 - 16	N/A	NA	IN/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   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	-145
Input Power per Port at 50°C, maximum, watts	300	300	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



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