

8 ft, 16-port, low band diplexed antenna,  $4 \times 698-798$  MHz,  $4 \times 824-894$  MHz and  $8 \times 1695-2360$  MHz,  $65^{\circ}$  HPBW,  $6 \times RET$ 

- Features broadband Low Band (698-894 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for 700 and 850 MHz, AWS, PCS and WCS applications
- The Low Band array is diplexed, providing independent tilt for the 700 and 850 MHz bands for 4T4R (4X MIMO) capability allowing the antenna to be used with 700 MHz and 850 MHz radios simultaneously
- 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 (2) | Mid band (4)

Power Consumption, active state, maximum 8 W

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Power Consumption, idle state, maximum 1 W

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

**Dimensions** 

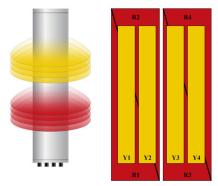
 Width
 498 mm | 19.606 in

 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 (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID	
R1	698-798	1 - 2	1	AISG1	CPxxxxxxxxxxxMM.1	
R3	698-798	5 - 6		AISGI		
R2	824-894	3 - 4	2 41554		60	
R4	824-894	7 - 8	2	AISG1	CPxxxxxxxxxxxMM.2	
Y1	1695-2360	9 - 10	3	AISG1	CPxxxxxxxxxxxMM.3	
Y2	1695-2360	11 - 12	4	AISG1	CPxxxxxxxxxxxMM.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 | 824 – 894 MHz

Polarization ±45°

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

## **Electrical Specifications**

·	R1,R3	R2,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	1,2,5,6	3,4,7,8	9,10,11,12,13,14,15,1	13,14,15,169,10,11,12,13,14,15,169,10,11,12,13,14,15,169,10,11,12,13,14,15,16				
Gain, dBi	14.7	15.1	17	17.8	18.4	18.9		
Beamwidth, Horizontal, degrees	60	61	69	68	62	58		
Beamwidth, Vertical, degrees	9.3	8.2	5.6	5.2	4.9	4.4		
Beam Tilt, degrees	0-10	0-10	0-10	0-10	0-10	0-10		
USLS (First Lobe), dB	18	17	17	18	19	19		
Front-to-Back Ratio at 180°, dB	31	29	35	35	34	35		
Front-to-Back Total Power at 180° ± 30°, dB	22	24	27	28	27	28		
CPR at Boresight, dB	20	20	22	23	23	21		
CPR at Sector, dB	11	10	7	8	7	8		
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		

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## Electrical Specifications, BASTA

Frequency Band, MHz	698-798	824-894	1695-1880	1850-1990	1920-2180	2300-2360
Gain by all Beam Tilts, average, dBi	14.7	15	16.9	17.7	18.3	18.7
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.7	±0.5	±0.6	±0.3
Beamwidth, Horizontal Tolerance, degrees	±4.9	±6.7	±8.6	±7.1	±5.6	±2.9
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.4	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	17	16	15	17	18	17

#### Mechanical Specifications

Effective Projective Area (EPA), frontal	0.81 m <sup>2</sup>   8.719 ft <sup>2</sup>
Effective Projective Area (EPA), lateral	0.25 m <sup>2</sup>   2.691 ft <sup>2</sup>

 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
 77.1 kg | 169.976 lb

#### Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

#### Included Products

COMMSCSPE®

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

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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 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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