

16-port, low band diplexed antenna, $4 \times 698-798$ MHz, $4 \times 824-894$ MHz and $8 \times 1695-2360$ MHz, 65° 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 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 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

COMMSC PE®

Power Consumption, idle state, maximum 1 W

Protocol 3GPP/AISG 2.0 (Multi-RET)

Dimensions

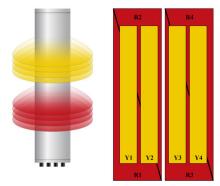
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 1499 mm | 59.016 in

 Net Weight, antenna only
 37.4 kg | 82.453 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID		
R1	698-798	1 - 2		NECT	CD		
R3	698-798	5 - 6	1	AISG1	CPxxxxxxxxxxxxMM.1		
R2	824-894	3 - 4	,	11554	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	CPxxxxxxxxxxxMM.5		
Y4	1695-2360	15 - 16	6	AISG1	CPxxxxxxxxxxxMM.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

Frequency Band, MHz	698-798	824-894	1695-1880	1850-1990	1920-2180	2300-2360
Gain, dBi	12.4	13.1	15.8	16.7	17.4	18
Beamwidth, Horizontal, degrees	72	66	71	68	63	59
Beamwidth, Vertical, degrees	17.3	14.6	7.5	7	6.6	5.9
Beam Tilt, degrees	2-16	2-16	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	18	19	13	18	19	21
Front-to-Back Ratio at 180°, dB	30	29	33	34	34	35
Front-to-Back Total Power at 180° ± 30°, dB	22	22	27	26	28	29
CPR at Boresight, dB	20	21	19	20	19	19
CPR at Sector, dB	13	9	8	8	7	5
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, average, dBi	12.2	12.9	15.7	16.6	17.2	17.8
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.6	±0.9	±0.6	±0.7	±0.7
Beamwidth, Horizontal Tolerance, degrees	±7.5	±3.4	±5.9	±9.2	±6	±2.1
Beamwidth, Vertical	±1.6	±1.2	±0.5	±0.4	±0.4	±0.2

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Tolerance, degrees

USLS, beampeak to 20° above 18 20 12 14 15 14

beampeak, dB

Mechanical Specifications

Effective Projective Area (EPA), frontal 0.47 m² | 5.059 ft² Effective Projective Area (EPA), lateral 0.14 m² | 1.507 ft²

 Wind Loading @ Velocity, frontal
 498.0 N @ 150 km/h (112.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 148.0 N @ 150 km/h (33.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 597.0 N @ 150 km/h (134.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 342.0 N @ 150 km/h (76.9 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
 1686 mm | 66.378 in

 Weight, gross
 50.4 kg | 111.113 lb

Regulatory Compliance/Certifications

Agency Classification

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

Included Products

BSAMNT-4 – 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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance



BSAMNT-4



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, net6.5 kg | 14.33 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



