

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 Location Bottom

RF Connector Quantity, high band 0
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
Power Consumption, idle state, maximum 1 W

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Protocol 3GPP/AISG 2.0 (Multi-RET)

Dimensions

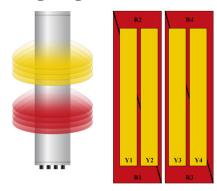
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 2438 mm | 95.984 in

 Net Weight, antenna only
 57.4 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	AISG1	CPxxxxxxxxxxxMM.1		
R3	698-728	5 - 6					
R2	758-798	3 - 4	2	AISG1	CPxxxxxxxxxxxMM.2		
R4	758-798	7 - 8	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	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



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

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
 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

