

# 16-port sector antenna, 4x 694–960, 4x 1427–2690, 4x 1695-2180 and 4x 2490-2690 MHz, 65° HPBW, 6x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- New endcap designs provide improved wind loading performance

#### 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 Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	12
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	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
Protocol	3GPP/AISG 2.0 (Single RET)

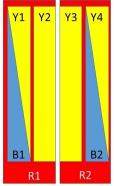
#### Dimensions

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Width	498 mm   19.606 in
Depth	197 mm   7.756 in
Length	2100 mm   82.677 in
Net Weight, antenna only	42.3 kg   93.255 lb

### Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxR2
B1	1695-2180	5-6	2	CDanaganaganagan D1
B2	1695-2180	7-8	3	CPxxxxxxxxxxxxxB1
Y1	2490-2690	9-10	4	
¥4	2490-2690	15-16	4	CPxxxxxxxxxxxxxXY1
Y2	1427-2690	11-12	5	CPxxxxxxxxxxxxXXXXXY2
Y3	1427-2690	13-14	6	CPxxxxxxxxxxxxXXXXXXXXXXY3

Left Right Bottom (Sizes of colored boxes are not true depictions of array sizes)

## Port Configuration



### **Electrical Specifications**

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Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz   1695 – 2180 MHz   2490 – 2690 MHz   694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

### **Electrical Specifications**

	R1,R2	R1,R2	R1,R2	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3
Frequency Band, MHz	698-806	790-896	890-960	1427-1518	8 1695–1990	) 1920–2180	2300-2500	2490-2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	11,12,13,14	1 11,12,13,14	11,12,13,14	11,12,13,14	11,12,13,14
Gain, dBi	15.1	15.4	15.6	15.1	16.7	17.2	17.6	17.6
Beamwidth, Horizontal, degrees	70	64	62	66	64	60	58	58
Beamwidth, Vertical, degrees	10.3	9	8.3	9.3	7.6	6.9	5.9	5.4
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	16	16	16	20	18	20	21	23
Front-to-Back Ratio at 180°, dB	32	32	31	33	35	35	33	31
Isolation, Cross Polarization, dB	28	28	28	26	27	27	26	28
Isolation, Inter-band, dB	28	28	28	27	27	27	28	28
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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	200	200

### **Electrical Specifications**

	B1,B2	B1,B2	Y1,Y4
Frequency Band, MHz	1695-1990	1920-2180	2490-2690
RF Port	5,6,7,8	5,6,7,8	9,10,15,16
Gain, dBi	18	18.4	18.6
Beamwidth, Horizontal, degrees	66	61	60
Beamwidth, Vertical, degrees	5.3	4.9	4.1
Beam Tilt, degrees	2-12	2-12	2-12
USLS (First Lobe), dB	17	17	24
Front-to-Back Ratio at 180°,	33	33	29

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dB			
Isolation, Cross Polarization, dB	28	28	28
Isolation, Inter-band, dB	28	28	28
VSWR   Return loss, dB	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	150

### Mechanical Specifications

Effective Projective Area (EPA), frontal	0.68 m <sup>2</sup>   7.319 ft <sup>2</sup>
Effective Projective Area (EPA), lateral	0.21 m²   2.26 ft²
Wind Loading @ Velocity, frontal	714.0 N @ 150 km/h (160.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	187.0 N @ 150 km/h (42.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	949.0 N @ 150 km/h (213.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	491.0 N @ 150 km/h (110.4 lbf @ 150 km/h)
Wind Speed, maximum	288 km/h (179 mph)

### Packaging and Weights

Width, packed	565 mm   22.244 in
Depth, packed	309 mm   12.165 in
Length, packed	2287 mm   90.039 in
Weight, gross	56.6 kg   124.781 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-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.

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### \* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

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