

# 8-port sector antenna, 4x 694–960 and 4x 1427–2690, 65° HPBW, 4x 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
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and 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 Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

### 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 (2)
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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# RRZZ-65B-R4N39-V1

Width	395 mm   15.551 in
Depth	228 mm   8.976 in
Length	2100 mm   82.677 in
Net Weight, antenna only	30.5 kg   67.241 lb

## Array Layout



RF Connector	Array ID	Frequency (MHz)	RET (SRET)	AISG RET UID
1 - 2	R1	694-960	1	CPxxxxxxxxxxxxxR1
3 - 4	R2	694-960	2	CPxxxxxxxxxxxxxR2
5 - 6	Y1	1427-2690	3	CPxxxxxxxxxxxxXXXXXY1
7 - 8	Y2	1427-2690	4	CPxxxxxxxxxxxxXX2

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

## Port Configuration



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## **Electrical Specifications**

Impedance	50 ohm
Operating Frequency Band	1427 – 1518 MHz   1695 – 2690 MHz   694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,100 W @ 50 °C

# Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	694-790	790-890	890-960	1427-151	8 1695–192	0 1920–218	0 2300–250	0 2490-2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8
Gain, dBi	14	15	15.3	16.1	17.8	18.2	18.6	18.7
Beamwidth, Horizontal, degrees	67	56	52	58	56	55	64	56
Beamwidth, Vertical, degrees	10.5	9.3	8.6	6.7	5.7	5.1	4.5	4.2
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	17	16	15	15	17	18	18	18
Front-to-Back Ratio at 180°, dB	32	31	30	33	34	30	27	29
Isolation, Cross Polarization, dB	25	25	25	26	26	26	26	26
Isolation, Inter-band, dB	25	25	25	27	27	27	27	27
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	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694-790	790-890	890-960	1427-151	8 1695–192	0 1920–218	0 2300–250	0 2490-2690
Gain by all Beam Tilts, average, dBi	13.7	14.6	15	15.7	17.2	17.8	18.2	18.2
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.4	±0.8	±1.1	±0.4	±0.5	±0.6
Beamwidth, Horizontal Tolerance, degrees	±8	±5	±5	±9	±11	±17	±9	±8
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.7	±0.6	±0.3	±0.4	±0.4	±0.3	±0.2
Front-to-Back Total Power at	20	21	20	21	26	25	23	25

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180° ± 30°, dB										
CPR at Boresight, dB	23	22	20	18	19	17	15	13		
CPR at Sector, dB	8	5	6	5	2	4	6	5		
Mechanical Specifi	cations									
Wind Loading @ Velocity, frontal 320.0 N @ 150 km/h (71.9 lbf @ 150 km/h)										
Wind Loading @ Velocity, lateral			288.0 N @	288.0 N @ 150 km/h (64.7 lbf @ 150 km/h)						
Wind Loading @ Velocity, maximum 643.0 N @ 150 km/h (144.6 lbf @ 150 km/h)										
Wind Loading @ Velocity, rear 366.0 N @ 150 km/h (82.3 lbf @ 150 km/h)										
<b>Nind Speed, maximum</b> 241 km/h (150 mph)										

### Packaging and Weights

Width, packed	505 mm   19.882 in
Depth, packed	386 mm   15.197 in
Length, packed	2243 mm   88.307 in
Weight, gross	41.7 kg   91.933 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

## **ISO** 9001:2015

### Included Products

BSAMNT-F

Wide Profile Antenna Fixed Tilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members.

## \* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance

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