

# RRCZV4-65B-R8



16-port sector antenna, 4x 694-960, 2x 790-960, 2x 1427-2690 and 8x 1695-2690 MHz, 65° HPBW, 8xRET

- 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

## 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, high band	0
RF Connector Quantity, mid band	10
RF Connector Quantity, low band	6
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 (3)   Mid band (5)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0

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## Dimensions

Width	498 mm   19.606 in
Depth	197 mm   7.756 in
Length	2280 mm   89.764 in
Net Weight, antenna only	44 kg   97.003 lb

## Array Layout

Y2

Y1

R1

Y3

R2

Y5

Y4

R3

Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxR1
R2	790-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxR2
R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxR3
Y1	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxY2
Y3	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxY3
Y4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxY4
Y5	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxY5

(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 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz   790 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

## Electrical Specifications

	R1,R3	R1,R3	R1,R3	R2	R2
Frequency Band, MHz	698–806	790–894	890–960	790–894	890–960
RF Port	1-2,5-6	1-2,5-6	1-2,5-6	3,4	3,4
Gain at Mid Tilt, dBi	13.8	14.4	14.6	13	13
Beamwidth, Horizontal, degrees	75	74	68	71	59
Beamwidth, Vertical, degrees	9.9	8.8	8	10	9.3
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	15	14	15	16

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Front-to-Back Ratio at 180°, dB	26	30	28	24	23
Front-to-Back Total Power at 180° ± 30°, dB	17	21	20	22	20
CPR at Boresight, dB	21	19	15	18	14
Isolation, Cross Polarization, typical, dB	25	25	25	25	25
Isolation, Inter-band, typical, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	300	300

## Electrical Specifications

	Y3	Y3	Y3	Y3	Y3	Y1,Y2,Y4,Y5	Y1,Y2,Y4,Y5	Y1,Y2,Y4,Y5	Y1,Y2,Y4,Y5
Frequency Band, MHz	1427–1518	1695–1995	1920–2300	2300–2500	2490–2690	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	11,12	11,12	11,12	11,12	11,12	7-10,13-16	7-10,13-16	7-10,13-16	7-10,13-16
Gain at Mid Tilt, dBi	16.6	17.8	18.4	18.6	17.8	16	16.8	16.8	16.4
Beamwidth, Horizontal, degrees	65	53	56	61	60	56	56	61	56
Beamwidth, Vertical, degrees	7.1	5.8	5.2	4.6	4.4	8.3	7.4	6.5	6.1
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	17	18	18	16	16	16	18	19
Front-to-Back Ratio at 180°, dB	35	36	35	35	33	30	32	31	28
Front-to-Back Total Power at 180° ± 30°, dB	29	29	29	29	27	24	26	25	23
CPR at Boresight, dB	20	19	17	16	17	17	17	22	22
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	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	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20	-153	-153	-153	-153	-153	-153	-153	-153	-153



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W, dBc									
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	250	250	200	200

## Mechanical Specifications

Wind Loading @ Velocity, frontal	800.0 N @ 150 km/h (179.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	247.0 N @ 150 km/h (55.5 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	959.0 N @ 150 km/h (215.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	551.0 N @ 150 km/h (123.9 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	2467 mm   97.126 in
Weight, gross	58.3 kg   128.529 lb

## 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## 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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