

# 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

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	10
<b>RF Connector Quantity, low band</b>	6
<b>RF Connector Quantity, total</b>	16

## Remote Electrical Tilt (RET) Information

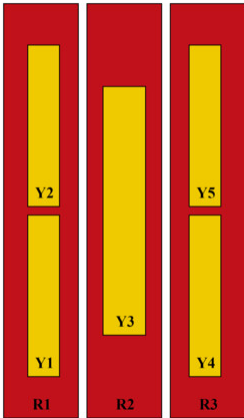
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (3)   Mid band (5)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0

## Dimensions

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

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	790-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxR3
Y1	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxY4
Y5	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxxY5

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

## Port Configuration



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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz   790 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

	<b>R1,R3</b>	<b>R1,R3</b>	<b>R1,R3</b>	<b>R2</b>	<b>R2</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>790–894</b>	<b>890–960</b>
<b>RF Port</b>	1-2,5-6	1-2,5-6	1-2,5-6	3,4	3,4
<b>Beamwidth, Horizontal, degrees</b>	75	74	68	71	59
<b>Beamwidth, Vertical, degrees</b>	9.9	8.8	8	10	9.3
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	17	15	14	15	16
<b>Front-to-Back Ratio at 180°, dB</b>	26	30	28	24	23
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	17	21	20	22	20
<b>Isolation, Cross Polarization, typical, dB</b>	25	25	25	25	25
<b>Isolation, Inter-band, typical, dB</b>	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	300	300

## Electrical Specifications, BASTA

	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>790–894</b>	<b>890–960</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.7	14.4	14.6	12.9	12.9
<b>Gain by all Beam Tilts</b>	±0.5	±0.5	±0.5	±0.8	±0.6

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## Tolerance, dB

<b>Beamwidth, Horizontal Tolerance, degrees</b>	±9.2	±7.2	±14.5	±12.1	±12.3
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±0.8	±0.6	±0.8	±0.8
<b>USLS, beampeak to 20° above beampeak, dB</b>	16	14	13	14	12
<b>CPR at Boresight, dB</b>	21	19	15	18	14

## Electrical Specifications

	Y3	Y3	Y3	Y3	Y3	Y1,Y2,Y4,Y5	Y1,Y2,Y4,Y5	Y1,Y2,Y4,Y5	Y1,Y2,Y4,Y5
<b>Frequency Band, MHz</b>	<b>1427-1518</b>	<b>1695-1995</b>	<b>1920-2300</b>	<b>2300-2500</b>	<b>2490-2690</b>	<b>1695-1995</b>	<b>1920-2300</b>	<b>2300-2500</b>	<b>2490-2690</b>
<b>RF Port</b>	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
<b>Beamwidth, Horizontal, degrees</b>	65	53	56	61	60	56	56	61	56
<b>Beamwidth, Vertical, degrees</b>	7.1	5.8	5.2	4.6	4.4	8.3	7.4	6.5	6.1
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	18	17	18	18	16	16	16	18	19
<b>Front-to-Back Ratio at 180°, dB</b>	35	36	35	35	33	30	32	31	28
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	29	29	29	29	27	24	26	25	23
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200	200	250	250	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>1427-1518</b>	<b>1695-1995</b>	<b>1920-2300</b>	<b>2300-2500</b>	<b>2490-2690</b>	<b>1695-1995</b>	<b>1920-2300</b>	<b>2300-2500</b>	<b>2490-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	16.5	17.7	18.3	18.4	17.6	15.9	16.6	16.7	16.3

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<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.3	±0.5	±0.7	±0.5	±0.7	±0.8	±0.8	±0.6	±0.8
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3.3	±3	±6	±4.3	±7.3	±5.2	±5.1	±5.3	±9.2
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.3	±0.4	±0.4	±0.3	±0.2	±0.7	±0.6	±0.3	±0.4
<b>USLS, beampeak to 20° above beampeak, dB</b>	14	17	18	17	16	14	15	14	13
<b>CPR at Boresight, dB</b>	20	19	17	16	17	17	17	22	22

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	800.0 N @ 150 km/h (179.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	247.0 N @ 150 km/h (55.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	959.0 N @ 150 km/h (215.6 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	551.0 N @ 150 km/h (123.9 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
<b>Depth, packed</b>	309 mm   12.165 in
<b>Length, packed</b>	2467 mm   97.126 in
<b>Weight, gross</b>	58.3 kg   128.529 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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-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.

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\* Footnotes

**Performance Note**

Severe environmental conditions may degrade optimum performance

# 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.

## Product Classification

**Product Type** Downtilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 115 mm | 4.528 in

**Compatible Diameter, minimum** 60 mm | 2.362 in

**Weight, net** 6.2 kg | 13.669 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 6.4 kg | 14.11 lb

## Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
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

# BSAMNT-3

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