

# RRZZV4-65B-R8H4



16-port sector antenna, 4x694-960 (R1 & R2), 4x1427-2690 (Y3 & Y4) and 8 x 1695-2690 MHz (Y1/Y2/Y5/Y6), 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   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<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>	12
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	16

## Remote Electrical Tilt (RET) Information

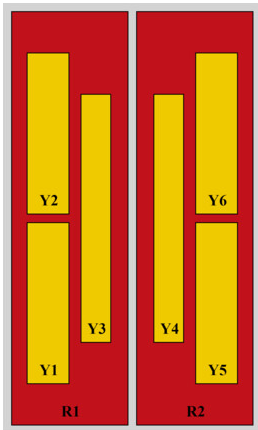
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	AISG1 8-pin DIN Female   AISG1 8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (6)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

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<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2100 mm   82.677 in
<b>Net Weight, antenna only</b>	42.9 kg   94.578 lb

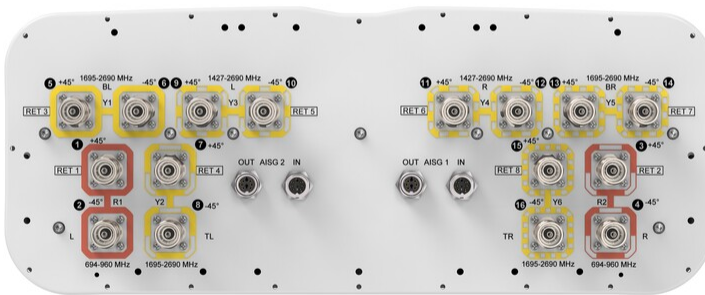
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	9 - 10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1427-2690	11 - 12	6	CPxxxxxxxxxxxxxxxxY4
Y5	1695-2690	13 - 14	7	CPxxxxxxxxxxxxxxxxY5
Y6	1695-2690	15 - 16	8	CPxxxxxxxxxxxxxxxxY6

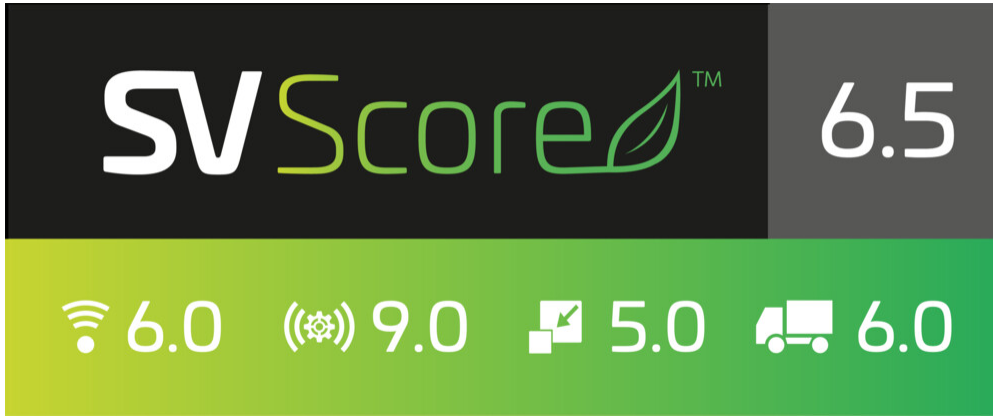
(Sizes of colored boxes are not true depictions of array sizes)

## Port Configuration



## Logo Image

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 1518 MHz   1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y3,Y4	Y3,Y4	Y3,Y4	Y3,Y4	Y3,Y4
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–896</b>	<b>890–960</b>	<b>1427–1518</b>	<b>1695–1990</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	1,2,3,4	1,2,3,4	1,2,3,4	9,10,11,12	9,10,11,12	9,10,11,12	9,10,11,12	9,10,11,12
<b>Gain at Mid Tilt, dBi</b>	14.9	15.4	15.4	16.1	17.5	18.5	18.8	18.6
<b>Beamwidth, Horizontal, degrees</b>	67	64	62	72	65	57	57	60
<b>Beamwidth, Vertical, degrees</b>	11.3	10.1	9.3	6.8	5.6	5	4.4	4.2
<b>Beam Tilt, degrees</b>	2–14	2–14	2–14	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	19	20	20	18	16	14	15	16
<b>Front-to-Back Ratio at 180°, dB</b>	33	30	29	33	35	37	36	35
<b>Isolation, Cross</b>	28	28	28	26	26	26	26	26

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<b>Polarization, dB</b>								
<b>Isolation, Inter-band, dB</b>	28	28	28	27	27	27	27	27
<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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	200	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–896</b>	<b>890–960</b>	<b>1427–1518</b>	<b>1695–1990</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	14.8	15.3	15.3	16.1	17.3	18.2	18.5	18.2
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.5	±0.6	±0.6	±0.4	±0.8	±0.7	±1
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±7	±3	±4	±6	±4	±7	±6	±10
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.8	±0.8	±0.4	±0.4	±0.5	±0.5	±0.3	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	18	18	17	14	14	14	15	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	22	22	22	24	28	29	29	28

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<b>CPR at Boresight, dB</b>	20	20	16	18	20	20	20	20
<b>CPR at Sector, dB</b>	11	8	11	7	9	7	7	4

## Electrical Specifications

	<b>Y1,Y2,Y5,Y6</b>	<b>Y1,Y2,Y5,Y6</b>	<b>Y1,Y2,Y5,Y6</b>	<b>Y1,Y2,Y5,Y6</b>
<b>Frequency Band, MHz</b>	<b>1695–1990</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>RF Port</b>	5,6,7,8,13,14,15,16	5,6,7,8,13,14,15,16	5,6,7,8,13,14,15,16	5,6,7,8,13,14,15,16
<b>Gain at Mid Tilt, dBi</b>	15.4	16.3	16.7	17
<b>Beamwidth, Horizontal, degrees</b>	68	60	59	57
<b>Beamwidth, Vertical, degrees</b>	9.6	8.7	7.9	7.5
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	16	16	17	17
<b>Front-to-Back Ratio at 180°, dB</b>	32	30	32	31
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25
<b>Isolation, Inter-band, dB</b>	27	27	27	27
<b>VSWR   Return loss, dB</b>	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
<b>Input Power per Port at 50°C, maximum, watts</b>	250	200	200	200

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## Electrical Specifications, BASTA

Frequency Band, MHz	1695–1990	1920–2300	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	15.4	16.2	16.7	16.7
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.7	±0.5	±0.3
Beamwidth, Horizontal Tolerance, degrees	±9	±8	±3	±5
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.8	±0.6	±0.4
USLS, beampeak to 20° above beampeak, dB	15	16	16	16
Front-to-Back Total Power at 180° ± 30°, dB	24	25	26	26
CPR at Boresight, dB	17	18	21	21
CPR at Sector, dB	6	7	9	7

## Mechanical Specifications

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	241 km/h (150 mph)

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## 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>	2287 mm   90.039 in
<b>Weight, gross</b>	57.2 kg   126.104 lb

## Regulatory Compliance/Certifications

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

## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance

# 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.

## 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** 6.5 kg | 14.33 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

## 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

