

# RRZZVV-65B-R6H4



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

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- 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>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>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## 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>	High band (4)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

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## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1848 mm   72.756 in
<b>Net Weight, without mounting kit</b>	37.5 kg   82.673 lb

## Array Layout



Array	Freq (MHz)	Conns	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	1427-2690	7-8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	9-10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY4

Left  
Bottom

Right  
Bottom

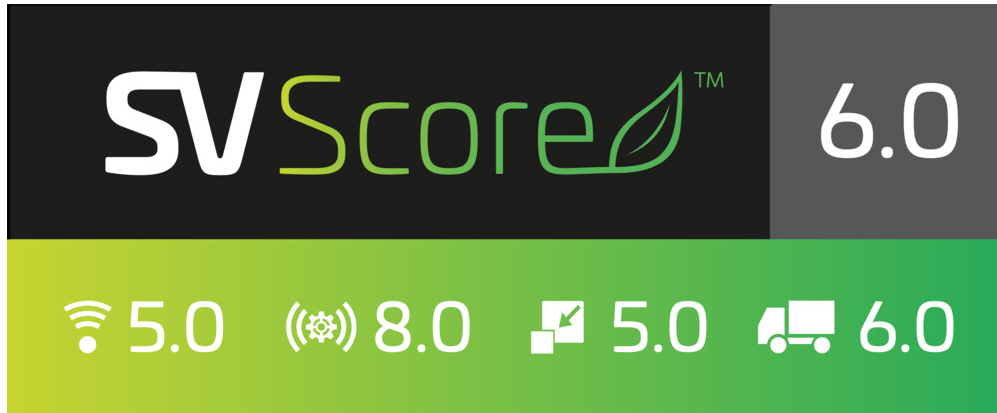
(Sizes of colored boxes are not true depictions of array sizes)

## Port Configuration

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## Logo Image



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1427 – 2690 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    Y1&Y4    Y1&Y4    Y2&Y3    Y2&Y3    Y2&Y3

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Frequency Band, MHz	694–790	790–890	890–960	1695–2200	2300–2690	1427–1518	1695–2200	2300–2690
Gain, dBi	14.3	14.6	14.7	17.9	18.3	15.9	17.6	17.9
Beamwidth, Horizontal, degrees	70	65	63	64	57	65	62	60
Beamwidth, Vertical, degrees	11.5	10.3	9.3	6.4	5	8.6	6.8	5.1
Beam Tilt, degrees	2–14	2–14	2–14	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	17	17	17	18	20	16	16
Front-to-Back Ratio at 180°, dB	34	30	27	32	29	34	34	31
Isolation, Cross Polarization, dB	27	27	27	27	27	26	26	27
Isolation, Inter-band, dB	27	27	27	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	200	250	250	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1695–2200	2300–2690	1427–1518	1695–2200	2300–2690
Gain by all Beam Tilts, average, dBi	13.9	14.2	14.4	16.9	17.9	15.4	16.6	17.3
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.6	±1.1	±0.6	±0.5	±0.9	±0.9
Gain by Beam Tilt, average, dBi	2° 14.1 8° 14.0 14° 13.5	2° 14.3 8° 14.3 14° 13.8	2° 14.7 8° 14.6 14° 13.8	2° 16.5 7° 17.1 12° 16.9	2° 17.4 7° 18.1 12° 17.8	2° 15.1 7° 15.4 12° 15.6	2° 16.3 7° 16.8 12° 16.6	2° 16.6 7° 17.5 12° 17.3
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.9	±0.8	±0.8	±0.4	±0.5	±0.8	±0.5
USLS, beampeak to 20° above beampeak, dB	17	17	15	15	15	13	15	16
Front-to-Back Total Power at 180° ± 30°, dB	20	20	20	25	24	26	28	26
CPR at Boresight, dB	21	20	22	17	17	19	19	16

## Mechanical Specifications

Wind Loading @ Velocity, frontal	694.0 N @ 150 km/h (156.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	235.0 N @ 150 km/h (52.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	900.0 N @ 150 km/h (202.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	571.0 N @ 150 km/h (128.4 lbf @ 150 km/h)

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**Wind Speed, maximum** 241 km/h (150 mph)

## Packaging and Weights

**Width, packed** 565 mm | 22.244 in

**Depth, packed** 368 mm | 14.488 in

**Length, packed** 2034 mm | 80.079 in

**Weight, gross** 52.4 kg | 115.522 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-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.

## \* Footnotes

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