

# RRV4-65B-R6H4



12-port sector antenna, 4x 694–960 and 8x 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
<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

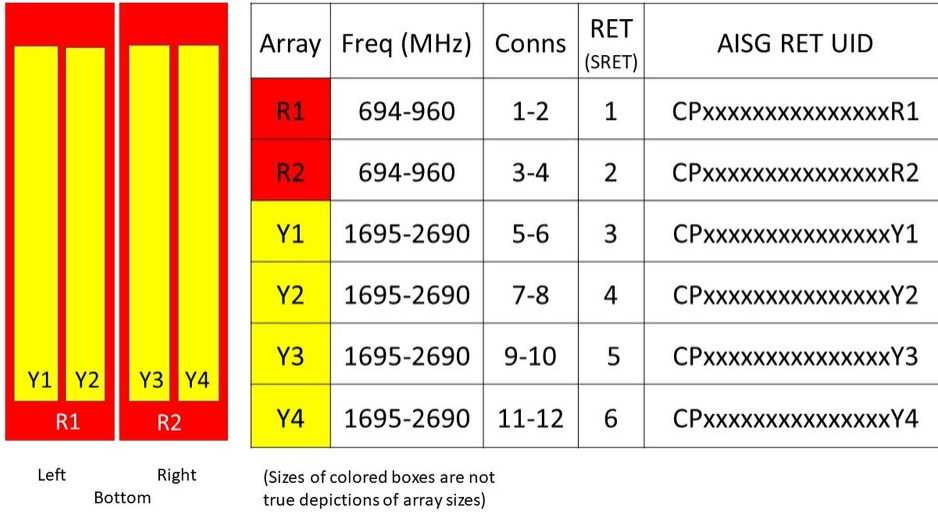
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

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<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>	36.5 kg   80.469 lb

## Array Layout



## Port Configuration

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## Electrical Specifications

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

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1695–1920	1920–2180	2300–2500	2500–2690
<b>Gain, dBi</b>	14.1	14.5	14.7	16.4	17.5	18	17.9
<b>Beamwidth, Horizontal, degrees</b>	70	65	62	68	61	59	58
<b>Beamwidth, Vertical, degrees</b>	11.5	10.3	9.4	7.4	6.6	5.8	5.5
<b>Beam Tilt, degrees</b>	2–14	2–14	2–14	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	19	19	18	17	17	19	17
<b>Front-to-Back Ratio at 180°, dB</b>	34	31	28	33	33	32	30
<b>Isolation, Cross Polarization, dB</b>	27	27	27	27	27	27	27
<b>Isolation, Inter-band, dB</b>	27	27	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

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<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	200	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>880–960</b>	<b>1695–1920</b>	<b>1920–2180</b>	<b>2300–2500</b>	<b>2500–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.7	14.2	14.4	15.9	16.9	17.6	17.4
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.6	±0.5	±0.4	±0.7	±0.8	±0.5	±0.5
<b>Gain by Beam Tilt, average, dBi</b>	2°   13.9 8°   13.8 14°   13.4	2°   14.3 8°   14.3 14°   13.8	2°   14.6 8°   14.5 14°   14.0	2°   15.6 7°   16.0 12°   15.8	2°   16.6 7°   17.1 12°   16.9	2°   17.4 7°   17.9 12°   17.3	2°   17.0 7°   17.6 12°   17.4
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±7.1	±3.8	±3.2	±4.4	±5.6	±4.3	±5.2
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.9	±0.7	±0.7	±0.5	±0.5	±0.5	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	19	17	17	15	16	15	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	20	21	21	27	26	27	25
<b>CPR at Boresight, dB</b>	20	21	22	17	20	18	19
<b>CPR at Sector, dB</b>	13	11	14	7	6	8	6

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.65 m <sup>2</sup>   6.997 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.22 m <sup>2</sup>   2.368 ft <sup>2</sup>
<b>Mechanical Tilt Range</b>	0°–17°
<b>Wind Loading @ Velocity, frontal</b>	694.0 N @ 150 km/h (156.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	235.0 N @ 150 km/h (52.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	900.0 N @ 150 km/h (202.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	571.0 N @ 150 km/h (128.4 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>	368 mm   14.488 in
<b>Length, packed</b>	2034 mm   80.079 in

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**Weight, gross**

50.7 kg | 111.774 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