

# RRZHHTT-65A-R6N39



14-port sector antenna, 4x 694–960, 2x 1427–2690, 4x 1695–2180 and 4x 2490–2690 MHz, 65° HPBW, 6x RET

- 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
- Superior windloading capability by using 395mm width slim radome

## 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, high band</b>	0
<b>RF Connector Quantity, mid band</b>	10
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	14

## Remote Electrical Tilt (RET) Information

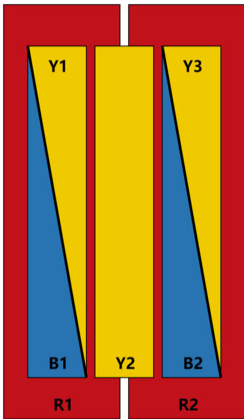
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (4)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum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

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## Dimensions

<b>Width</b>	395 mm   15.551 in
<b>Depth</b>	228 mm   8.976 in
<b>Length</b>	1500 mm   59.055 in
<b>Net Weight, antenna only</b>	27.3 kg   60.186 lb

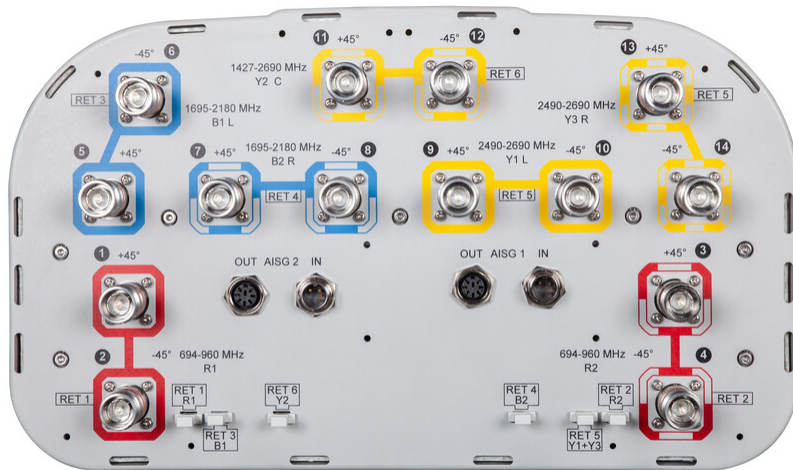
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
B1	1695-2180	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxB2
Y1	2490-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY1
Y3	2490-2690	13 - 14			
Y2	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY2

(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 – 2180 MHz   2490 – 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	Y2	Y2	Y2	Y2	Y2	B1,B2	B1,B2	Y1,Y3
<b>Frequency Band, MHz</b>	698–806	790–896	890–960	1427–1518	1695–1990	1920–2300	2300–2500	2490–2690	1695–1990	1920–2180	2490–2690
<b>RF Port</b>	1-4	1-4	1-4	11,12	11,12	11,12	11,12	11,12	5-8	5-8	9,10,13,14
<b>Gain at Mid Tilt, dBi</b>	12.1	12.9	13.3	14.8	15.9	17.1	18.1	18	15.8	16.6	17.5
<b>Beamwidth, Horizontal, degrees</b>	63	56	56	59	60	54	49	51	69	65	55
<b>Beamwidth, Vertical, degrees</b>	16.9	15	13.9	8.4	7.3	6.5	5.6	5.2	6.7	6.2	5
<b>Beam Tilt, degrees</b>	3–16	3–16	3–16	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	17	19	19	17	16	16	18	19	16	17	19
<b>Front-to-Back Ratio at 180°, dB</b>	26	28	29	33	29	31	35	27	29	30	27
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	18	20	21	26	23	24	28	28	23	24	22
<b>CPR at Boresight, dB</b>	23	23	23	14	16	16	23	16	18	20	22
<b>CPR at Sector, dB</b>	8	6	8	8	5	4	2	-1	4	3	1
<b>Isolation, Cross Polarization, dB</b>	25	25	25	26	26	26	26	26	26	26	26

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<b>Isolation, Inter-band, dB</b>	25	25	25	27	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	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>	-150	-150	-150	-150	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	250	200	150	250	250	150

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	297.0 N @ 150 km/h (66.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	253.0 N @ 150 km/h (56.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	612.0 N @ 150 km/h (137.6 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	307.0 N @ 150 km/h (69.0 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	505 mm   19.882 in
<b>Depth, packed</b>	386 mm   15.197 in
<b>Length, packed</b>	1643 mm   64.685 in
<b>Weight, gross</b>	42.3 kg   93.255 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



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## 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