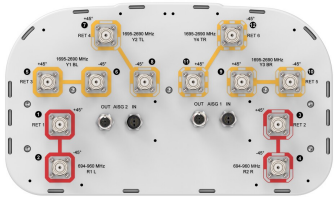


# RRV4-65B-R6N39



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

## 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>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

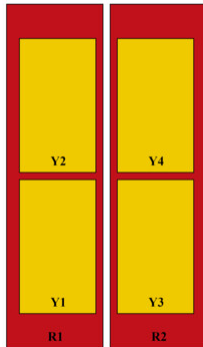
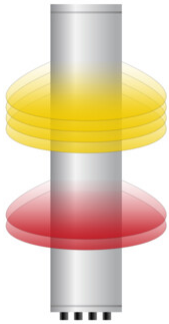
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state,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

## Dimensions

# RRV4-65B-R6N39

<b>Width</b>	395 mm   15.551 in
<b>Depth</b>	228 mm   8.976 in
<b>Length</b>	1999 mm   78.701 in
<b>Net Weight, antenna only</b>	30 kg   66.139 lb

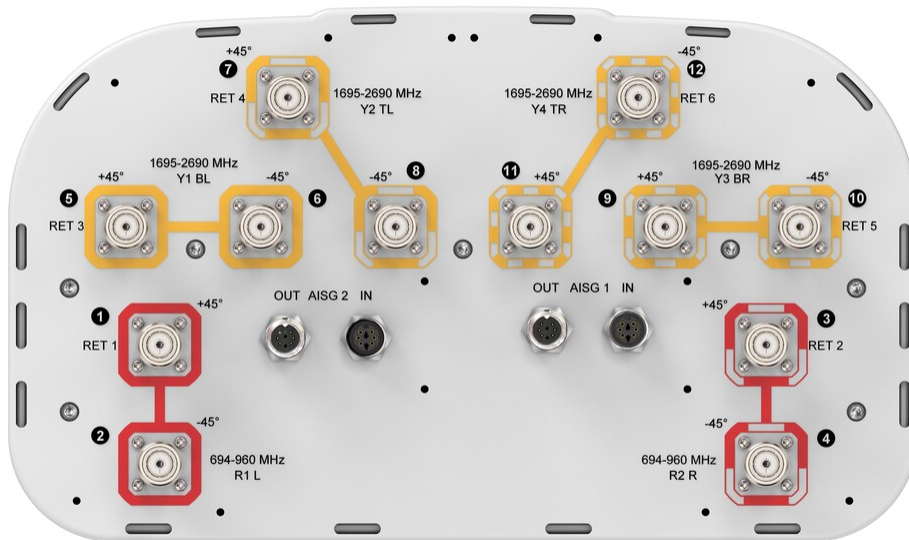
## Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	65°	5	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	65°	6	AISG1	CPxxxxxxxxxxxxxxxxY4

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

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz   694 – 960 MHz

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<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,200 W @ 50 °C

## Electrical Specifications

	<b>R1,R2</b>	<b>R1,R2</b>	<b>R1,R2</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>
<b>Frequency Band, MHz</b>	<b>694-806</b>	<b>790-894</b>	<b>890-960</b>	<b>1695-1920</b>	<b>1920-2200</b>	<b>2300-2490</b>	<b>2490-2690</b>
<b>RF Port</b>	1-4	1-4	1-4	5-12	5-12	5-12	5-12
<b>Gain, dBi</b>	14.2	14.5	15	15.9	16.4	16.9	17
<b>Beamwidth, Horizontal, degrees</b>	72	61	58	65	70	69	58
<b>Beamwidth, Vertical, degrees</b>	10.8	9.9	9.4	9.2	8.2	7.4	6.6
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	18	18	20	16	16	16	17
<b>Front-to-Back Ratio at 180°, dB</b>	30	28	27	34	34	28	28
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	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
<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>694-806</b>	<b>790-894</b>	<b>890-960</b>	<b>1695-1920</b>	<b>1920-2200</b>	<b>2300-2490</b>	<b>2490-2690</b>
<b>Frequency Band, MHz</b>	<b>694-806</b>	<b>790-894</b>	<b>890-960</b>	<b>1695-1920</b>	<b>1920-2200</b>	<b>2300-2490</b>	<b>2490-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.6	14.2	14.6	15.4	16	16.4	16.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.7	±0.5	±0.6	±0.9	±0.5	±0.6	±0.5
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±11	±6	±5	±5	±12	±13	±7
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.7	±0.6	±0.6	±0.8	±0.7	±0.4	±0.5
<b>USLS, beampeak to 20° above beampeak, dB</b>	18	16	14	14	15	15	14
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	18	20	19	28	26	23	22
<b>CPR at Boresight, dB</b>	22	22	20	18	18	17	19

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CPR at Sector, dB                      11                      9                      8                      8                      5                      4                      9

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	396.0 N @ 150 km/h (89.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	337.0 N @ 150 km/h (75.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	816.0 N @ 150 km/h (183.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	410.0 N @ 150 km/h (92.2 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>	2132 mm   83.937 in
<b>Weight, gross</b>	44 kg   97.003 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.

## \* Footnotes

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