

# RRV4-65D-R6VB-V6



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>	Aluminum
<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>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

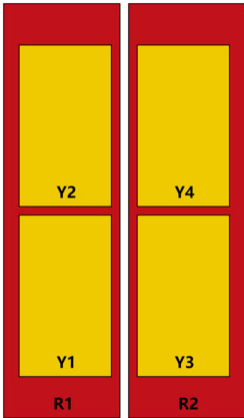
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (4)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state,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

## Dimensions

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<b>Width</b>	469 mm   18.465 in
<b>Depth</b>	198 mm   7.795 in
<b>Length</b>	2580 mm   101.575 in
<b>Net Weight, antenna only</b>	43.7 kg   96.342 lb

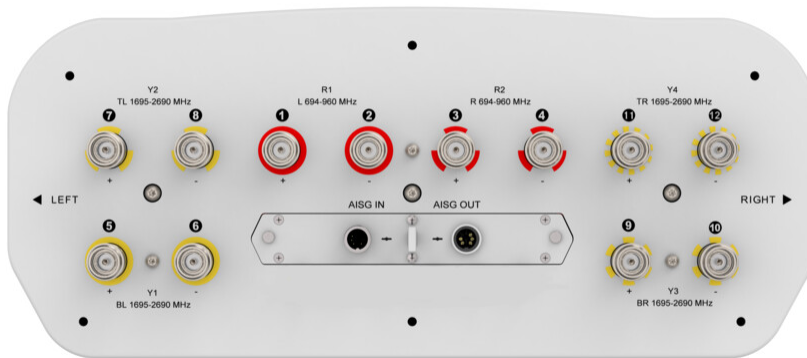
## Array Layout



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
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,000 W

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## 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>698-806</b>	<b>790-894</b>	<b>890-960</b>	<b>1695-1995</b>	<b>1920-2300</b>	<b>2300-2500</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>	16.2	16.8	17	16.6	16.8	16.8	17
<b>Beamwidth, Horizontal, degrees</b>	65	64	63	67	65	63	58
<b>Beamwidth, Vertical, degrees</b>	8.6	7.7	7.2	7	6.3	5.6	5.3
<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	20	20	15	18	22	21
<b>Front-to-Back Ratio, Copolarization 180° ± 30°, dB</b>	27	27	30	29	29	27	26
<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, maximum, watts</b>	250	250	250	200	200	200	200

## Electrical Specifications, BASTA

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<b>Gain by all Beam Tilts, average, dBi</b>	15.8	16.6	16.8	16	16.3	16.2	16.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.4	±0.3	±0.8	±0.7	±0.8	±0.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±4	±3	±4	±5	±7	±8	±6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.4	±0.3	±0.5	±0.5	±0.2	±0.3
<b>CPR at Boresight, dB</b>	26	30	27	24	21	19	19

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	709.0 N @ 150 km/h (159.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	383.0 N @ 150 km/h (86.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	753.0 N @ 150 km/h (169.3 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	200 km/h (124 mph)

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## Packaging and Weights

<b>Width, packed</b>	540 mm   21.26 in
<b>Depth, packed</b>	275 mm   10.827 in
<b>Length, packed</b>	2850 mm   112.205 in
<b>Weight, gross</b>	58.2 kg   128.309 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



## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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