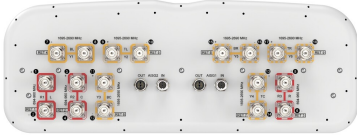


# R3V6-65B-R9V2

18-port sector antenna, 6x 694-960, 12x 1695-2690 MHz, 65° HPBW, 9xRET



- 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

## 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, mid band</b>	12
<b>RF Connector Quantity, low band</b>	6
<b>RF Connector Quantity, total</b>	18

## Remote Electrical Tilt (RET) Information

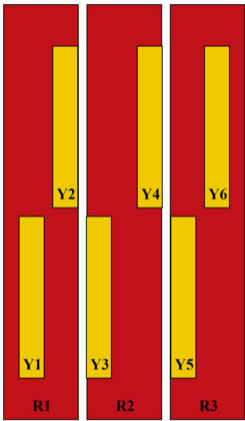
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10-30 Vdc
<b>Internal RET</b>	Low band (3)   Mid band (6)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0

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## Dimensions

<b>Width</b>	579 mm   22.795 in
<b>Depth</b>	212 mm   8.346 in
<b>Length</b>	2100 mm   82.677 in
<b>Net Weight, antenna only</b>	47.5 kg   104.719 lb

## Array Layout

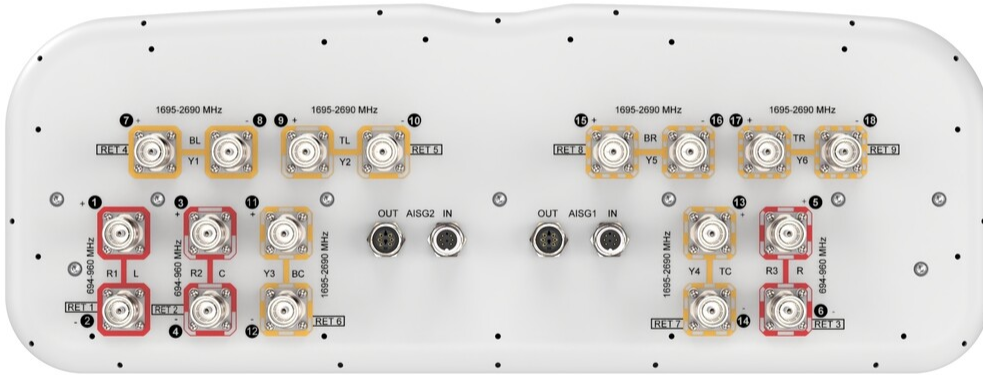


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxR3
Y1	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxY4
Y5	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxxY5
Y6	1695-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxxxxxY6

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

## Electrical Specifications

	R1,R3	R1,R3	R1,R3	R2	R2	R2
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>	<b>698–806</b>	<b>790–894</b>	<b>890–960</b>
<b>RF Port</b>	1, 2, 5, 6	1, 2, 5, 6	1, 2, 5, 6	3, 4	3, 4	3, 4
<b>Gain at Mid Tilt, dBi</b>	13.9	14.5	14.6	12.6	13.9	14.9
<b>Beamwidth, Horizontal,</b>	62	60	56	62	58	51

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degrees

<b>Beamwidth, Vertical, degrees</b>	10.3	9.1	8.6	11	10.5	9.9
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	15	15	15	14	14	16
<b>Front-to-Back Ratio at 180°, dB</b>	29	26	25	25	27	31
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	24	22	21	22	24	28
<b>Isolation, Cross Polarization, typical, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, typical, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	300	300	300

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698-806</b>	<b>790-894</b>	<b>890-960</b>	<b>698-806</b>	<b>790-894</b>	<b>890-960</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.8	14.4	14.5	12.5	13.9	14.8
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	15	14	14	14	16
<b>CPR at Boresight, dB</b>	21	20	20	16	19	21
<b>CPR at Sector, dB</b>	12	10	4	7	7	7

## Electrical Specifications

	<b>Y1,Y3,Y5</b>	<b>Y1,Y3,Y5</b>	<b>Y1,Y3,Y5</b>	<b>Y1,Y3,Y5</b>
<b>Frequency Band, MHz</b>	<b>1695-1995</b>	<b>1920-2300</b>	<b>2300-2500</b>	<b>2490-2690</b>
<b>RF Port</b>	7, 8, 11, 12, 15, 16	7, 8, 11, 12, 15, 16	7, 8, 11, 12, 15, 16	7, 8, 11, 12, 15, 16
<b>Gain at Mid Tilt, dBi</b>	16.3	17.2	17.7	17.8
<b>Beamwidth, Horizontal, degrees</b>	61	59	61	62
<b>Beamwidth, Vertical, degrees</b>	6.8	6.1	5.6	5.3
<b>Beam Tilt, degrees</b>	2-12	2-12	2-12	2-12
<b>USLS (First Lobe), dB</b>	16	17	19	18
<b>Front-to-Back Ratio at 180°, dB</b>	29	29	32	32

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Front-to-Back Total Power at 180° ± 30°, dB	24	24	24	27
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
VSWR   Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	250	250	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	1695–1995	1920–2300	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	16.2	17	17.6	17.7
USLS, beampeak to 20° above beampeak, dB	15	15	16	16
CPR at Boresight, dB	19	19	21	22
CPR at Sector, dB	6	4	5	4

## Electrical Specifications

	Y2,Y4,Y6	Y2,Y4,Y6	Y2,Y4,Y6	Y2,Y4,Y6
Frequency Band, MHz	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	9, 10, 13, 14, 17, 18	9, 10, 13, 14, 17, 18	9, 10, 13, 14, 17, 18	9, 10, 13, 14, 17, 18
Gain at Mid Tilt, dBi	16	17	17.7	17.5
Beamwidth, Horizontal, degrees	64	61	60	61
Beamwidth, Vertical, degrees	6.8	6.2	5.6	5.3
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	17	20	19
Front-to-Back Ratio at 180°, dB	29	29	31	32
Front-to-Back Total Power at 180° ± 30°, dB	24	25	27	28
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
VSWR   Return loss, dB	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

# R3V6-65B-R9V2

<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	200	200
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## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>1695–1995</b>	<b>1920–2300</b>	<b>2300–2500</b>	<b>2490–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.9	16.8	17.5	17.4
<b>USLS, beampeak to 20° above beampeak, dB</b>	13	15	15	15
<b>CPR at Boresight, dB</b>	20	21	20	19
<b>CPR at Sector, dB</b>	5	4	4	4

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	576.0 N @ 150 km/h (129.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	241.0 N @ 150 km/h (54.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	919.0 N @ 150 km/h (206.6 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	584.0 N @ 150 km/h (131.3 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	681 mm   26.811 in
<b>Depth, packed</b>	368 mm   14.488 in
<b>Length, packed</b>	2239 mm   88.15 in
<b>Weight, gross</b>	61.8 kg   136.246 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



## Included Products

# R3V6-65B-R9V2

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BSAMNT-4

- 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