

# RRZZV4-65B-R8H4



16-port sector antenna, 4x694-960 (R1 & R2), 4x1427-2690 (Y3 & Y4) and 8 x 1695-2690 MHz (Y1/Y2/Y5/Y6), 65° HPBW, 8xRET

- 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

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	0
RF Connector Quantity, mid band	12
RF Connector Quantity, low band	4
RF Connector Quantity, total	16

## Remote Electrical Tilt (RET) Information

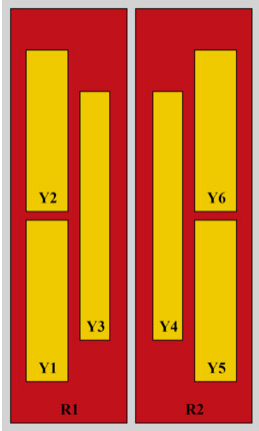
RET Hardware	CommRET v2
RET Interface	AISG1 8-pin DIN Female   AISG1 8-pin DIN Male
RET Interface, quantity	2 female   2 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2)   Mid band (6)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

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## Dimensions

Width	498 mm   19.606 in
Depth	197 mm   7.756 in
Length	2100 mm   82.677 in
Net Weight, antenna only	42.9 kg   94.578 lb

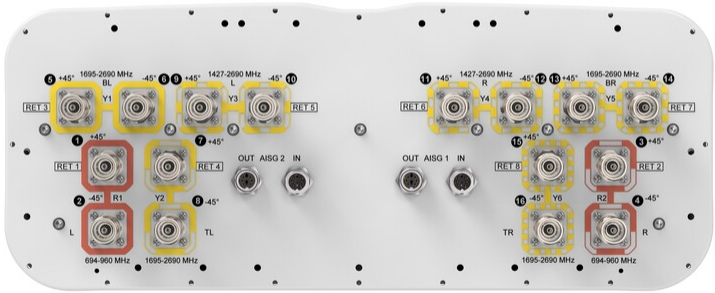
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	CPxxxxxxxxxxxxY2
Y3	1427-2690	9 - 10	5	CPxxxxxxxxxxxxY3
Y4	1427-2690	11 - 12	6	CPxxxxxxxxxxxxY4
Y5	1695-2690	13 - 14	7	CPxxxxxxxxxxxxY5
Y6	1695-2690	15 - 16	8	CPxxxxxxxxxxxxY6

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

## Port Configuration



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Logo Image



## Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 1518 MHz   1695 – 2690 MHz   694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y3,Y4	Y3,Y4	Y3,Y4	Y3,Y4	Y3,Y4
Frequency Band, MHz	698–806	790–896	890–960	1427–1518	1695–1990	1920–2300	2300–2500	2490–2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	9,10,11,12	9,10,11,12	9,10,11,12	9,10,11,12	9,10,11,12
Gain at Mid Tilt, dBi	14.9	15.4	15.4	16.1	17.5	18.5	18.8	18.6
Beamwidth, Horizontal, degrees	67	64	62	72	65	57	57	60
Beamwidth, Vertical, degrees	11.3	10.1	9.3	6.8	5.6	5	4.4	4.2
Beam Tilt, degrees	2–14	2–14	2–14	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	20	20	18	16	14	15	16
Front-to-Back Ratio at 180°, dB	33	30	29	33	35	37	36	35

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Isolation, Cross Polarization, dB	28	28	28	26	26	26	26	26
Isolation, Inter-band, dB	28	28	28	27	27	27	27	27
VSWR   Return loss, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200	200	200

## Electrical Specifications

	Y1,Y2,Y5,Y6	Y1,Y2,Y5,Y6	Y1,Y2,Y5,Y6	Y1,Y2,Y5,Y6
Frequency Band, MHz	1695–1990	1920–2300	2300–2500	2490–2690
RF Port	5,6,7,8,13,14,15,16	5,6,7,8,13,14,15,16	5,6,7,8,13,14,15,16	5,6,7,8,13,14,15,16
Gain at Mid Tilt, dBi	15.4	16.3	16.7	17
Beamwidth, Horizontal, degrees	68	60	59	57
Beamwidth, Vertical, degrees	9.6	8.7	7.9	7.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	16	17	17
Front-to-Back Ratio at 180°, dB	32	30	32	31
Isolation, Cross Polarization, dB	25	25	25	25
Isolation,	27	27	27	27

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Inter-band, dB				
VSWR	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
Return loss, dB				
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	200	200	200

## Mechanical Specifications

Wind Loading @ Velocity, frontal	714.0 N @ 150 km/h (160.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	187.0 N @ 150 km/h (42.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	949.0 N @ 150 km/h (213.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	491.0 N @ 150 km/h (110.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

## Packaging and Weights

Width, packed	565 mm   22.244 in
Depth, packed	309 mm   12.165 in
Length, packed	2287 mm   90.039 in
Weight, gross	57.2 kg   126.104 lb

## Regulatory Compliance/Certifications

Agency	Classification
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

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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.
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## \* Footnotes

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