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, 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)

Dimensions

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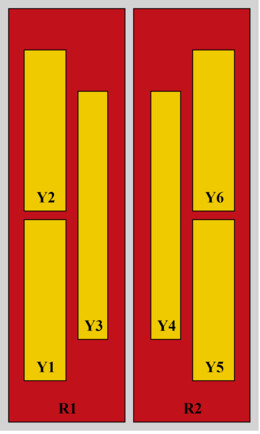
Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2100 mm | 82.677 in
Net Weight, antenna only	42.9 kg | 94.578 lb

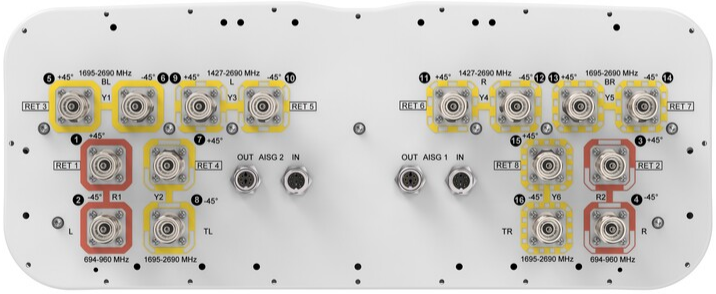
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	3	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	4	CPxxxxxxxxxxxxxxY2
Y3	1427-2690	9 - 10	5	CPxxxxxxxxxxxxxxY3
Y4	1427-2690	11 - 12	6	CPxxxxxxxxxxxxxxY4
Y5	1695-2690	13 - 14	7	CPxxxxxxxxxxxxxxY5
Y6	1695-2690	15 - 16	8	CPxxxxxxxxxxxxxxY6

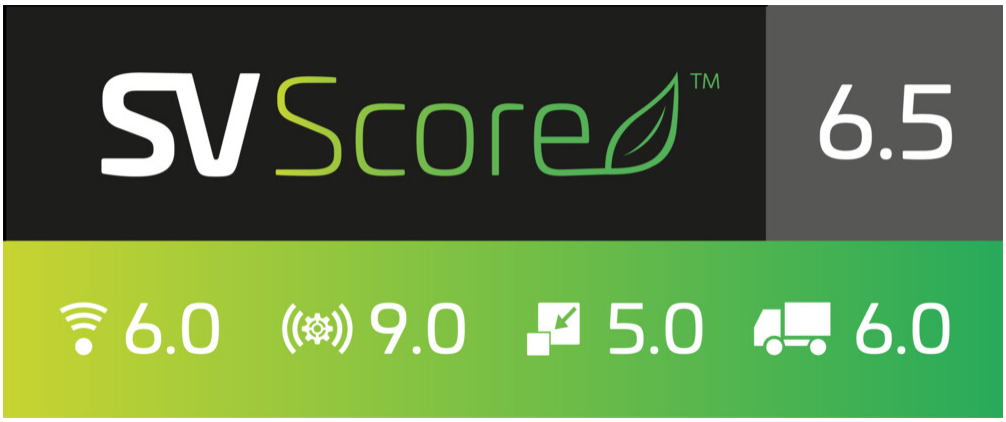
(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration



Logo Image

RRZZV4-65B-R8H4



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
Isolation, Cross	28	28	28	26	26	26	26	26

Polarization, dB								
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, BASTA

Frequency Band, MHz	**698–806**	**790–896**	**890–960**	**1427–1518**	**1695–1990**	**1920–2300**	**2300–2500**	**2490–2690**
Gain by all Beam Tilts, average, dBi	14.8	15.3	15.3	16.1	17.3	18.2	18.5	18.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±0.6	±0.6	±0.4	±0.8	±0.7	±1
Beamwidth, Horizontal Tolerance, degrees	±7	±3	±4	±6	±4	±7	±6	±10
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.8	±0.4	±0.4	±0.5	±0.5	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	18	18	17	14	14	14	15	15
Front-to-Back Total Power at 180° ± 30°, dB	22	22	22	24	28	29	29	28

CPR at Boresight, dB	20	20	16	18	20	20	20	20
CPR at Sector, dB	11	8	11	7	9	7	7	4

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, Inter-band, dB	27	27	27	27
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	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	1695–1990	1920–2300	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	15.4	16.2	16.7	16.7
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.7	±0.5	±0.3
Beamwidth, Horizontal Tolerance, degrees	±9	±8	±3	±5
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.8	±0.6	±0.4
USLS, beampeak to 20° above beampeak, dB	15	16	16	16
Front-to-Back Total Power at 180° ± 30°, dB	24	25	26	26
CPR at Boresight, dB	17	18	21	21
CPR at Sector, dB	6	7	9	7

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)

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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 www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant/Exempted

Included Products

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