RRZZVV-65B-R6NV3

12-port sector antenna, 4x 694-960,4x 1427–2690 and 4x 1695- 2690 MHz, 65° HPBW, 6x RET

- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- Reduces the amount of aluminum used to minimize CO2 release
- High Gain Antenna Solution
- High radiation and pattern efficiency for improved coverage area, capacity or reduced power consumption for a given area

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
Radome Material	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) | Mid band (4)
Power Consumption, active state, maximum	13 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

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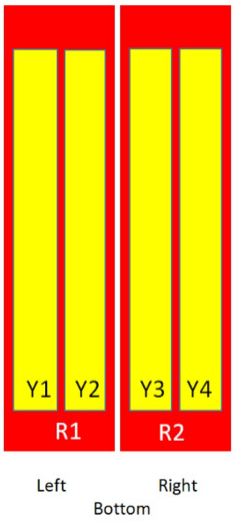
Dimensions

Width	430 mm | 16.929 in
Depth	197 mm | 7.756 in
Length	2100 mm | 82.677 in
Net Weight, antenna only	36.5 kg | 80.469 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxY1
Y2	1427-2690	7-8	4	CPxxxxxxxxxxxxxxxY2
Y3	1427-2690	9-10	5	CPxxxxxxxxxxxxxxxY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxY4

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

Port Configuration

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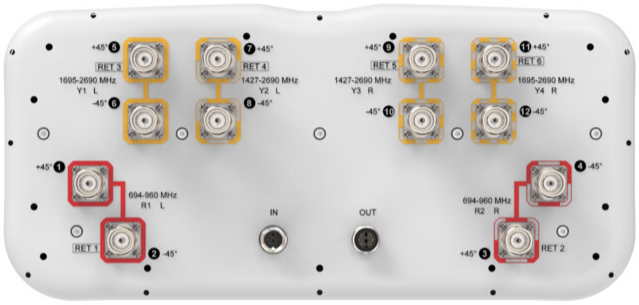
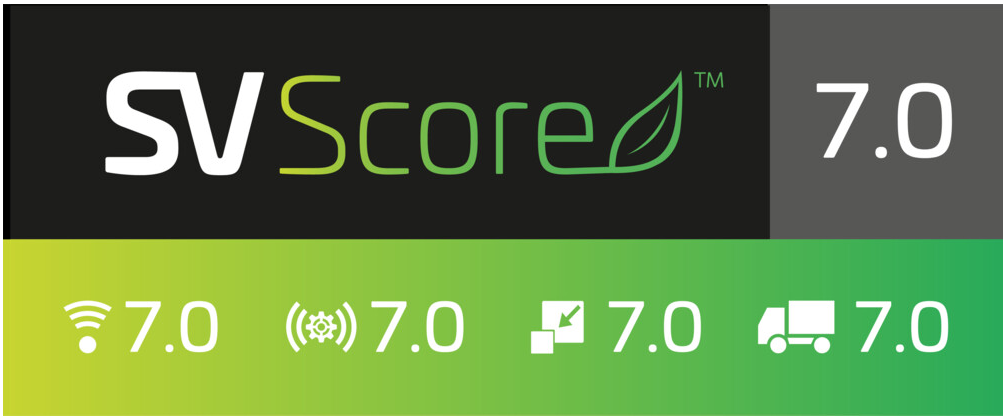


Logo Image



Electrical Specifications

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

Electrical Specifications

RRZZVV-65B-R6NV3

	R1,R2	R1,R2	R1,R2	Y2,Y3	Y2,Y3
Frequency Band, MHz	**698–806**	**790–894**	**890–960**	**1427–1518**	**1695–1995**
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	7,8,9,10	7,8,9,10
Beamwidth, Horizontal, degrees	63	60	56	73	67
Beamwidth, Vertical, degrees	10.3	9.2	8.5	6.9	5.9
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	17	16	16	16
Front-to-Back Ratio at 180°, dB	26	28	28	32	35
Front-to-Back Total Power at 180° ± 30°, dB	20	20	22	22	25
Isolation, Cross Polarization, dB	25	25	25	26	26
Isolation, Inter-band, dB	25	25	25	26	26
VSWR | Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**790–894**	**890–960**	**1427–1518**	**1695–1995**
Gain by all Beam Tilts, average, dBi	14.4	15.1	15.3	15.7	17.3
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.4	±0.5	±0.8
Beamwidth, Horizontal Tolerance, degrees	±9	±5	±7	±7	±10
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.6	±0.4	±0.4	±0.5
USLS, beampeak to 20° above beampeak, dB	15	16	14	14	15
CPR at Boresight, dB	22	22	22	20	22

Electrical Specifications

	Y2,Y3	Y2,Y3	Y2,Y3	Y1,Y4	Y1,Y4	Y1,Y4	Y1,Y4
Frequency Band, MHz	**1920–2300**	**2300–2500**	**2490–2690**	**1695–1995**	**1920–2300**	**2300–2500**	**2490–2690**
RF Port	7,8,9,10	7,8,9,10	7,8,9,10	5,6,11,12	5,6,11,12	5,6,11,12	5,6,11,12
Beamwidth, Horizontal,	64	60	58	70	66	64	62

degrees							
Beamwidth, Vertical, degrees	5.3	4.3	4.1	6	5.3	4.7	4.3
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	14	17	17	17	15	15
Front-to-Back Ratio at 180°, dB	36	35	33	30	31	32	31
Front-to-Back Total Power at 180° ± 30°, dB	26	28	27	24	25	26	25
Isolation, Cross Polarization, dB	26	26	26	27	27	27	27
Isolation, Inter-band, dB	26	26	26	26	26	26	26
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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	200	200	250	250	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	**1920–2300**	**2300–2500**	**2490–2690**	**1695–1995**	**1920–2300**	**2300–2500**	**2490–2690**
Gain by all Beam Tilts, average, dBi	18.1	19.1	19	16.9	18	18.5	18.5
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.5	±0.6	±1	±0.6	±0.5	±0.4
Beamwidth, Horizontal Tolerance, degrees	±6	±4	±4	±7	±6	±4	±7
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.3	±0.2	±0.7	±0.4	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	15	14	14	14	14	14	14
CPR at Boresight, dB	21	18	21	22	22	21	18

Mechanical Specifications

Wind Loading @ Velocity, frontal	494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	266.0 N @ 150 km/h (59.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	780.0 N @ 150 km/h (175.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

RRZZVV-65B-R6NV3

Width, packed	511 mm | 20.118 in
Depth, packed	318 mm | 12.52 in
Length, packed	2221 mm | 87.441 in
Weight, gross	48.7 kg | 107.365 lb

Regulatory Compliance/Certifications

Agency	Classification
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