

# RRZZVV-65B-R6NV3



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

- SEED antenna providing high gain and improved efficiency
- Reduces the amount of aluminum used to minimize CO2 release
- Innovative aerodynamic shape optimized for reduced wind loading in every direction
- 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, high band	0
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

## Remote Electrical Tilt (RET) Information

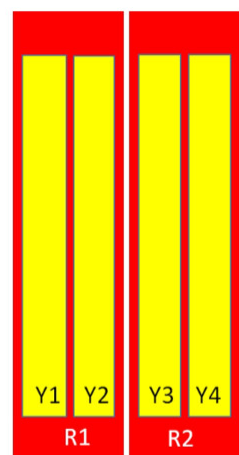
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female   8-pin DIN Male
RET Interface, quantity	1 female   1 male
Input Voltage	10-30 Vdc
Internal RET	Low band (2)   Mid band (4)
Power Consumption, active state, maximum	13 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

# RRZZVV-65B-R6NV3

## Dimensions

Width	430 mm   16.929 in
Depth	197 mm   7.756 in
Length	2100 mm   82.677 in
Net Weight, antenna only	36.7 kg   80.91 lb

## Array Layout



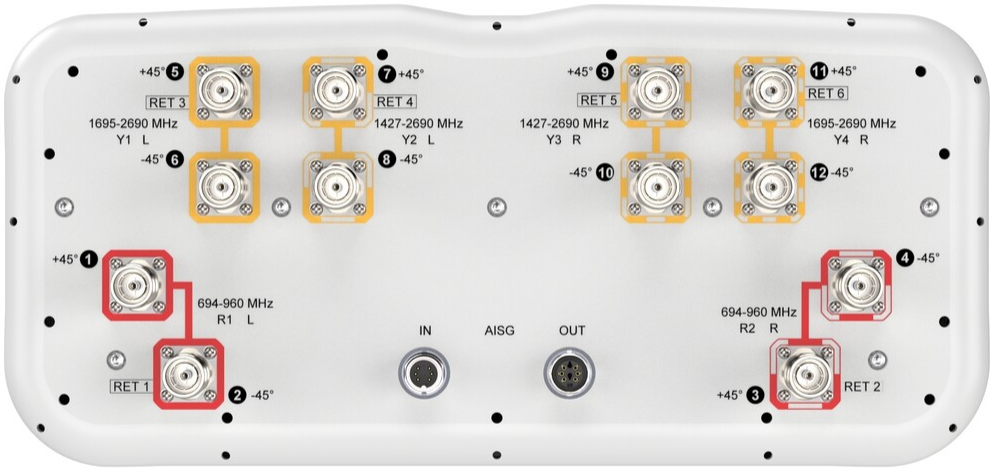
Left Bottom Right

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1427-2690	7-8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	9-10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY4

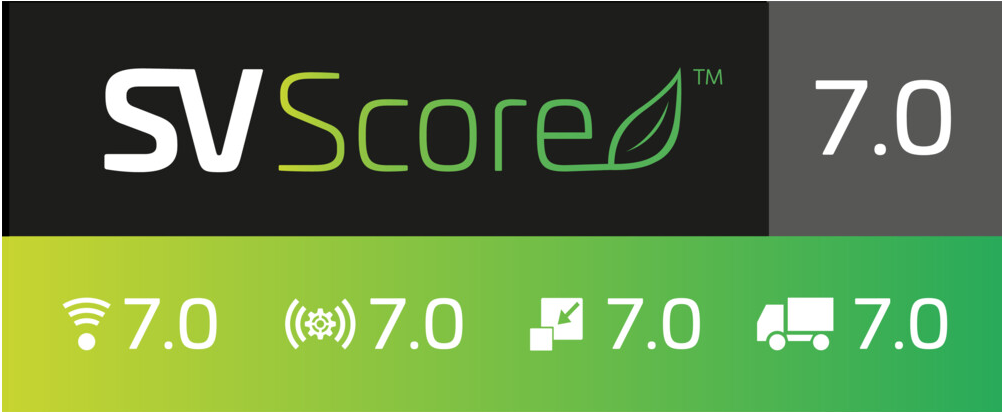
(Sizes of colored boxes are not true depictions of array sizes)

## Port Configuration

# RRZZVV-65B-R6NV3



## Logo Image



## Electrical Specifications

# RRZZVV-65B-R6NV3

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,200 W @ 50 °C

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3
Frequency Band, MHz	698–806	790–894	890–960	1427–1518	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	7,8,9,10	7,8,9,10	7,8,9,10	7,8,9,10	7,8,9,10
Gain at Mid Tilt, dBi	14.5	15.1	15.5	15.7	17.4	18.3	19.3	19.3
Beamwidth, Horizontal, degrees	63	60	56	73	67	64	60	58
Beamwidth, Vertical, degrees	10.3	9.2	8.5	6.9	5.9	5.3	4.3	4.1
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	15	17	16	16	16	17	14	17
Front-to-Back Ratio at 180°, dB	26	28	28	32	35	36	35	33
Front-to-Back Total Power at 180° ± 30°, dB	20	20	22	22	25	26	28	27
Isolation, Cross Polarization, dB	25	25	25	26	26	26	26	26
Isolation, Inter-band, dB	25	25	25	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	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	250	200	200

## Electrical Specifications

	Y1,Y4	Y1,Y4	Y1,Y4	Y1,Y4
Frequency Band, MHz	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	5,6,11,12	5,6,11,12	5,6,11,12	5,6,11,12
Gain at Mid Tilt, dBi	17	18.1	18.7	18.6
Beamwidth, Horizontal, degrees	70	66	64	62
Beamwidth, Vertical, degrees	6	5.3	4.7	4.3
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	17	15	15

# RRZZVV-65B-R6NV3

Front-to-Back Ratio at 180°, dB	30	31	32	31
Front-to-Back Total Power at 180° ± 30°, dB	24	25	26	25
Isolation, Cross Polarization, dB	27	27	27	27
Isolation, Inter-band, dB	26	26	26	26
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

## 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

Width, packed	530 mm   20.866 in
Depth, packed	349 mm   13.74 in
Length, packed	2272 mm   89.449 in
Weight, gross	49.2 kg   108.467 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

# RRZZVV-65B-R6NV3

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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.
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\* Footnotes

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