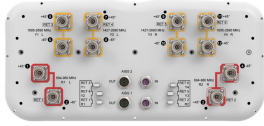


RRZZVV-65D-R6NV3



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
- GREEN and 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	2 female 2 male
Input Voltage	10-30 Vdc
Internal RET	Low band (2) Mid band (4)
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	430 mm 16.929 in
Depth	197 mm 7.756 in
Length	2769 mm 109.016 in
Net Weight, antenna only	46 kg 101.413 lb

Array Layout

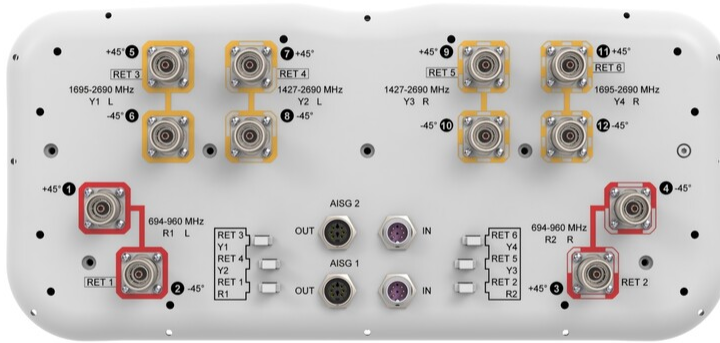
The diagram shows two main sections, Left (R1) and Right (R2), each containing four vertical elements (Y1-Y4). The elements are arranged in two columns per section. The Left section (R1) contains elements Y1 and Y2 in the first column, and Y3 and Y4 in the second column. The Right section (R2) contains elements Y3 and Y4 in the first column, and Y1 and Y2 in the second column. The elements are color-coded: R1 and R2 are red, and Y1-Y4 are yellow.

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

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

Port Configuration

RRZZVV-65D-R6NV3



Electrical Specifications

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
BASTA Version, electrical	BASTA v11

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
Beamwidth, Horizontal, degrees	71	61	59	69	62	63	59	58
Beamwidth, Vertical, degrees	7.5	6.8	6.4	7.2	5.8	5.3	4.3	4
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	18	18	17	17	17	15	16
Front-to-Back Ratio at 180°, dB	30	31	30	30	30	31	32	34
Front-to-Back Total Power at	20	21	20	22	23	26	26	26

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180° ± 30°, dB

Isolation, Cross Polarization, dB	27	27	27	25	25	25	25	25
Isolation, Inter-band, dB	27	27	27	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, BASTA

Frequency Band, MHz	698–806	790–894	890–960	1427–1518	1695–1995	1920–2300	2300–2500	2490–2690
Gain by all Beam Tilts, average, dBi	15.5	16.3	16.6	15.7	17.6	18.2	19.2	19.2
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.6	±0.4	±0.5	±0.7	±0.5	±0.6	±0.4
Beamwidth, Horizontal Tolerance, degrees	±7	±8	±6	±7	±7	±6	±6	±5
Beamwidth, Vertical Tolerance, degrees	±0.5	±0.5	±0.4	±0.3	±0.5	±0.5	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	14	14	15	15	16	15	14	13
CPR at Boresight, dB	19	20	16	17	21	18	22	22

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
Beamwidth, Horizontal, degrees	66	64	63	63
Beamwidth, Vertical, degrees	6.1	5.4	4.7	4.3
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	17	19	19
Front-to-Back Ratio at 180°, dB	26	30	30	34
Front-to-Back Total Power at 180° ± 30°, dB	22	24	26	26
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	26	26	26	26

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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	17.3	18.3	18.8	18.8
Gain by all Beam Tilts Tolerance, dB	±1	±0.5	±0.4	±0.4
Beamwidth, Horizontal Tolerance, degrees	±8	±4	±4	±5
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.4	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	16	15	15	16
CPR at Boresight, dB	21	21	21	18

Mechanical Specifications

Wind Loading @ Velocity, frontal	680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	434.0 N @ 150 km/h (97.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	529 mm 20.827 in
Depth, packed	356 mm 14.016 in
Length, packed	2897 mm 114.055 in
Weight, gross	59.5 kg 131.175 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

Included Products

RRZZVV-65D-R6NV3

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