RV3T4-65D-R5VB-V2

16-port sector antenna, 2x 698–960, 6x 1710-2690MHz, 65° HPBW, and 8x 2300-2690MHz, 80° HPBW, 5x RET

- Combination of Penta-Band antenna and 2.4/2.6 GHz 8T8R beam forming antenna
- Beamforming array utilizes MQs cluster connectors
- Optimized for Software Defined Split Six Sector applications on 2.4/2.6 GHz
- Antenna with tilt scale indicators and integrated pluggable RET

General Specifications

Antenna Type	Sector and beamforming
Band	Multiband
Calibration Connector Interface	MQ5 Male
Calibration Connector Quantity	1
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
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN Female | MQ4 Male | MQ5 Male
RF Connector Location	Bottom
RF Connector Quantity, mid band	14
RF Connector Quantity, low band	2
RF Connector Quantity, total	16

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 (1) | Mid band (4)
Power Consumption, active state, maximum	10 W

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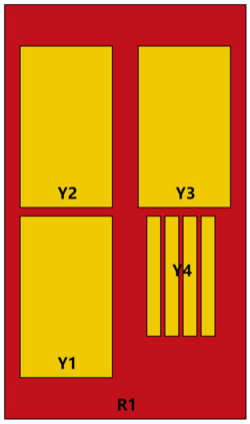
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	397 mm | 15.63 in
Depth	197 mm | 7.756 in
Length	2647 mm | 104.213 in
Net Weight, antenna only	28.5 kg | 62.832 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	RET UID
R1	698-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxR1
Y1	1710-2690	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1710-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1710-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxxxY3
Y4	2300-2690	9 - 16	BF°	5	AISG1	CPxxxxxxxxxxxxxxY4

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

Port Configuration

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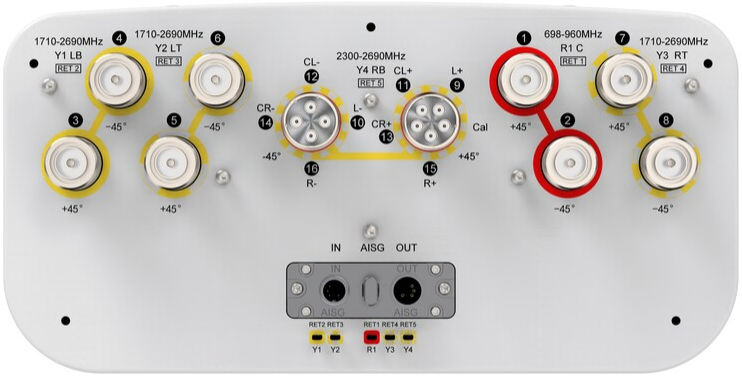

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1710 – 2690 MHz | 2300 – 2690 MHz | 698 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W

Electrical Specifications

	R1	R1	R1	Y1-Y3	Y1-Y3	Y1-Y3	Y1-Y3	Y1-Y3
Frequency Band, MHz	**698–806**	**790–894**	**880–960**	**1710–1880**	**1850–1990**	**1920–2170**	**2300–2400**	**2490–2690**
RF Port	1,2	1,2	1,2	3-8	3-8	3-8	3-8	3-8
Gain, dBi	17	17.4	17.4	17	17.2	17.6	18.2	18.6
Beamwidth, Horizontal, degrees	62	64	68	65	66	66	62	55
Beamwidth, Vertical, degrees	8.4	7.8	7.5	7.5	7.2	6.8	6.1	5.6
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	17	17	15	16	15	16	17
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	24	30	33	28	28	30	31	29

CPR at Boresight, dB	21	24	20	22	21	23	26	23
Isolation, Cross Polarization, dB	26	26	26	28	28	28	28	28
Isolation, Inter-band, dB	28	28	28	28	28	28	28	28
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	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	250	250	250	200	200	200	200	200

Electrical Specifications

	Y4	**Y4**
Frequency Band, MHz	**2300–2400**	**2490–2690**
RF Port	9-16	9-16
Gain, dBi	16.3	16.7
Beamwidth, Horizontal, degrees	83	79
Beamwidth, Vertical, degrees	5.9	5.5
Beam Tilt, degrees	2–12	2–12
USLS (First Lobe), dB	16	17
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	25	26
Coupling level, Amp, Antenna port to Cal port, dB	26	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB	±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB	1	1
Coupler, max Phase Δ, Antenna port to Cal port, degrees	9	9
CPR at Boresight, dB	19	18
Isolation, Cross Polarization, dB	25	25
Isolation, Inter-band, dB	25	25
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0
Input Power per Port, maximum, watts	50	50

Electrical Specifications, Broadcast 65°

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Frequency Band, MHz	2300–2400	2490–2690
Gain, dBi	17.8	18
Beamwidth, Horizontal at 3 dB, degrees	65	65
Beamwidth, Vertical, degrees	6	5.5
CPR at Boresight, dB	23	18
USLS (First Lobe), dB	22	21

Electrical Specifications, Service Beam

Frequency Band, MHz	2300–2400	2490–2690
Steered 0° Gain, dBi	21.4	21.6
Steered 0° Beamwidth, Horizontal, degrees	24	22
Steered 0° Horizontal Sidelobe, dB	13	12
Steered 0° USLS (First Lobe), dB	19	21
Steered 30° Gain, dBi	19.9	20.2
Steered 30° Beamwidth, Horizontal, degrees	27	24

Electrical Specifications, Soft Split

Frequency Band, MHz	2300–2400	2490–2690
Gain, dBi	20	20.2
Beamwidth, Horizontal, degrees	30	26
USLS (First Lobe), dB	19	20

Mechanical Specifications

Wind Loading @ Velocity, frontal	864.0 N @ 150 km/h (194.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	398.0 N @ 150 km/h (89.5 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	373.0 N @ 150 km/h (83.9 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h (124 mph)

Packaging and Weights

Width, packed	492 mm | 19.37 in
Depth, packed	317 mm | 12.48 in

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Length, packed	2847 mm | 112.087 in
Weight, gross	41.5 kg | 91.492 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.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

Included Products

BSAMNT-B95-03	–	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