

RV4S4-65A-R6



18-port sector antenna, 2x 698–960, 8x 1695-2690 and 8x 3300–3800 MHz, 65° HPBW, 6x RET

- Beam-forming weighting table available upon request
- M-LOC cluster connector for 3.3-3.8GHz, equipped with calibration port
- Provide a future-ready antenna solution with flexibility to reassign antenna, support 2T2R at 698-960MHz, 4T4R at 1695-2690MHz, and 8T8R at 3300-3800MHz
- Combination of FDD MIMO antenna and 3.5GHz 8T8R TDD beam forming antenna, all in one for 5G ready
- Retractable tilt indicator rods

General Specifications

Antenna Type	Sector
Band	Multiband
Calibration Connector Interface	M-LOC
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	4.3-10 Female M-LOC
RF Connector Location	Bottom
RF Connector Quantity, high band	16
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	2
RF Connector Quantity, total	18

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

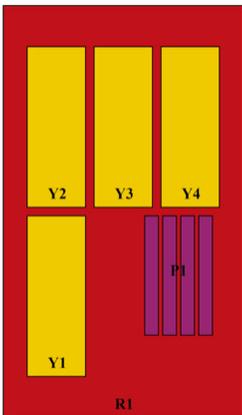
RV4S4-65A-R6

Input Voltage	10–30 Vdc
Internal RET	High band (5) Low band (1)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	395 mm 15.551 in
Depth	228 mm 8.976 in
Length	1600 mm 62.992 in
Net Weight, without mounting kit	28.6 kg 63.052 lb
TDD Column Spacing	42 mm 1.654 in

Array Layout

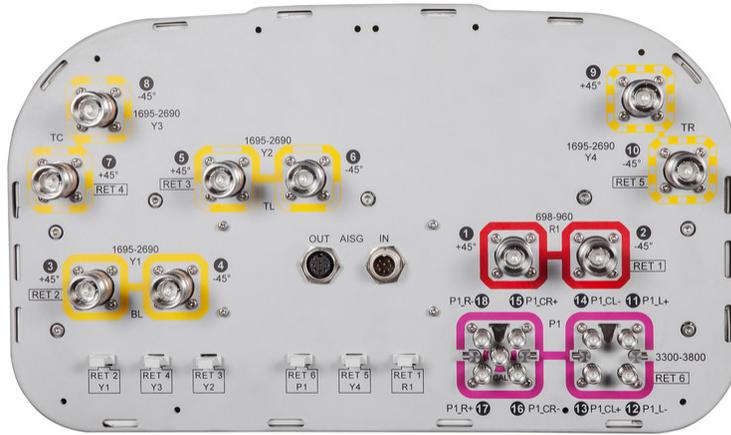


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	698-960	1 - 2	1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2690	3 - 4	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	5 - 6	3	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	7 - 8	4	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	9 - 10	5	CPxxxxxxxxxxxxxxxxY4
P1	3300-3800	11 - 18	6	CPxxxxxxxxxxxxxxxxP1

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

Port Configuration

RV4S4-65A-R6



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 3300 – 3800 MHz 698 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1	R1	Y1-Y4	Y1-Y4	Y1-Y4	P1	P1
Frequency Band, MHz	698-890	890-960	1695-1920	1920-2200	2300-2690	3300-3600	3600-3800
Gain, dBi	14.9	14.9	15.4	16.1	16.2	15	15.1
Beamwidth, Horizontal, degrees	67	69	67	64	65	93	87
Beamwidth, Vertical, degrees	13.1	11.4	11.1	10.1	8.6	7.2	6.7
Beam Tilt, degrees	2-16	2-16	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	21	18	15	17	19	14	14
Front-to-Back Ratio at 180°, dB	36	32	31	31	30	33	33
Coupling level, Amp, Antenna port to Cal port, dB						26	26
Coupling level, max Amp Δ,						±2	±2

RV4S4-65A-R6

Antenna port to Cal port, dB							
Coupler, max Amp Δ, Antenna port to Cal port, dB						0.9	0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees						7	7
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	28	28	25	25	25	25	25
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	-150	-150	-150	-150	-150	-140	-140
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	75	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300–3600	3600–3800
Gain, dBi	16	16.1
Beamwidth, Horizontal, degrees	60	61
Beamwidth, Horizontal Tolerance, degrees	±4.7	±3.3

Electrical Specifications, Service Beam

Frequency Band, MHz	3300–3600	3600–3800
Steered 0° Gain, dBi	19.2	19.4
Steered 0° Gain Tolerance, dBi	±0.4	±0.5
Steered 0° Beamwidth, Horizontal, degrees	27	26
Steered 13° USLS (First Lobe), dB	4	5
Steered 30° Gain, dBi	18.8	18.9
Steered 30° Gain Tolerance, dBi	±0.4	±0.6
Steered 30° Beamwidth, Horizontal, degrees	28	27
Steered 42° Front-to-Back Total Power at 180° ± 30°, dB	4	6

Electrical Specifications, Soft Split

Frequency Band, MHz	3300–3600	3600–3800
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RV4S4-65A-R6

Gain, dBi	18.7	19.2
Beamwidth, Horizontal, degrees	32	28
CPR at Beampeak, dB	18	15
Horizontal Sidelobe, dB	15	15

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.29 m ² 3.122 ft ²
Effective Projective Area (EPA), lateral	0.21 m ² 2.26 ft ²
Mechanical Tilt Range	0°–18°
Wind Loading @ Velocity, frontal	312.0 N @ 150 km/h (70.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	226.0 N @ 150 km/h (50.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	533.0 N @ 150 km/h (119.8 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	505 mm 19.882 in
Depth, packed	386 mm 15.197 in
Length, packed	1733 mm 68.228 in
Weight, gross	41.8 kg 92.153 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

RV4S4-65A-R6

Performance Note

Severe environmental conditions may degrade optimum performance

