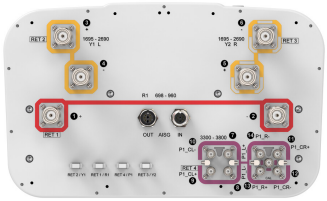
RVVS4-65M-R4



14-port sector antenna, 2x 698-960(R1), 4x 1695-2690(Y1&Y2) MHz, 65° HPBW and 8x 3300-3800(P1) MHz, 90° HPBW, 4x RET.

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- M-LOC cluster connector for 3.3-3.8GHz, equipped with calibration port
- Combination of FDD MIMO antenna and 3.5GHz 8T8R TDD beam forming antenna, all in one for 5G ready

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	8
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	14

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	High band (1) | Low band (1) | Mid band (2)

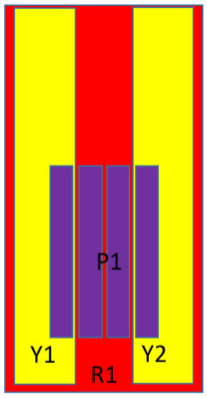
RVVS4-65M-R4

Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	350 mm | 13.78 in
Depth	208 mm | 8.189 in
Length	999 mm | 39.331 in
Net Weight, without mounting kit	17.4 kg | 38.36 lb
TDD Column Spacing	41 mm | 1.614 in

Array Layout

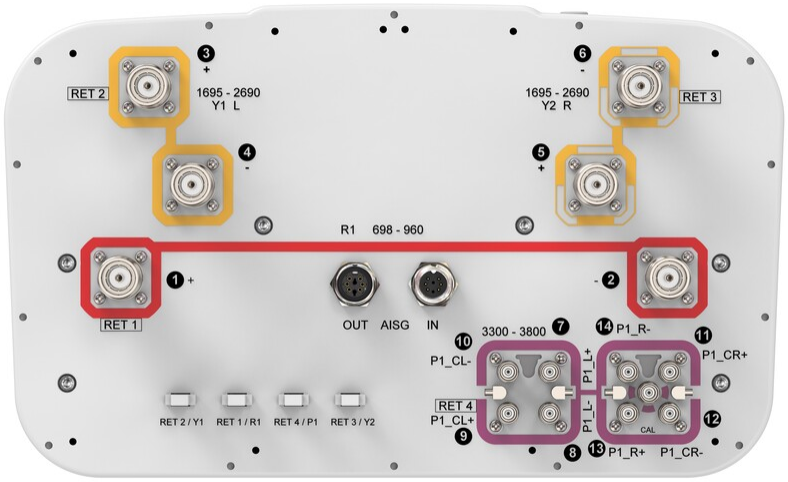


Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-960	1-2	1	CPxxxxxxxxxxxxxxR1
Y1	1695-2690	3-4	2	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	5-6	3	CPxxxxxxxxxxxxxxY2
P1	3300-3800	7-14	4	CPxxxxxxxxxxxxxxP1

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

Port Configuration

RVVS4-65M-R4



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz | 3300 – 3800 MHz | 698 – 960 MHz
Polarization	±45°
Total Input Power, maximum	800 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**698–862**	**880–960**	**1695–1920**	**1920–2200**	**2300–2690**	**3300–3600**	**3600–3800**
Gain, dBi	13	13.4	15.6	15.8	15.9	15.5	15.8
Beamwidth, Horizontal, degrees	70	65	66	68	66	85	84
Beamwidth, Vertical, degrees	21.2	18.7	9.3	8.2	6.9	6.6	6.2
Beam Tilt, degrees	4–18	4–18	2–12	2–12	2–12	0–10	0–10
USLS (First Lobe), dB	15	17	15	15	16	16	15
Front-to-Back Ratio at 180°, dB	31	32	31	29	28	29	29
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						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	25	25	25	25	25	25	25
Isolation, Co-polarization, dB						20	20
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	200	200	200	200	150	75	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**3300–3600**	**3600–3800**
Gain, dBi	16.6	17.1
Beamwidth, Horizontal, degrees	65	63
Beamwidth, Vertical, degrees	6.6	6.2
Front-to-Back Total Power at 180° ± 30°, dB	25	26
USLS (First Lobe), dB	20	20

Electrical Specifications, Envelope Pattern

Frequency Band, MHz	**3300–3600**	**3600–3800**
Gain, dBi	19.6	20

Electrical Specifications, Service Beam

Frequency Band, MHz	**3300–3600**	**3600–3800**
Steered 0° Gain, dBi	19.6	20
Steered 0° Beamwidth, Horizontal, degrees	27	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	29	29
Steered 0° Horizontal Sidelobe, dB	13	13
Steered 30° Gain, dBi	18.7	19.3
Steered 30° Beamwidth, Horizontal, degrees	31	27
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	26	29

Steered 30° Horizontal Sidelobe, dB	8	8

Electrical Specifications, Soft Split

Frequency Band, MHz	**3300–3600**	**3600–3800**
Gain, dBi	18.6	19.1
Beamwidth, Horizontal, degrees	34	30
Front-to-Back Total Power at 180° ± 30°, dB	27	28

Mechanical Specifications

Wind Loading @ Velocity, frontal	152.0 N @ 150 km/h (34.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	124.0 N @ 150 km/h (27.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	322.0 N @ 150 km/h (72.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	161.0 N @ 150 km/h (36.2 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	451 mm | 17.756 in
Depth, packed	368 mm | 14.488 in
Length, packed	1142 mm | 44.961 in
Weight, gross	27.9 kg | 61.509 lb

Regulatory Compliance/Certifications

Agency	**Classification**
CHINA-ROHS	Above maximum concentration value
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