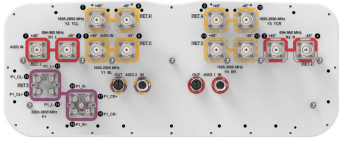


RRV4S4-65D-R5



20-port sector antenna, 4x 694–960, 8x 1695–2690 MHz, 65° HPBW and 8x 3300–3800 MHz, 90° HPBW, 5x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Cluster connectors for the beam-forming array, including eight RF ports plus one calibration port

General Specifications

Antenna Type	Sector- and beamforming
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
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	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	20

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 Bias Tee	Port 1 Port 5
Internal RET	High band (1) Low band (2) Mid band (2)
Power Consumption, active state, maximum	8 W

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Power Consumption, idle state, maximum

1 W

Protocol

3GPP/AISG 2.0 (Single RET)

Dimensions

Width

498 mm | 19.606 in

Depth

197 mm | 7.756 in

Length

2688 mm | 105.827 in

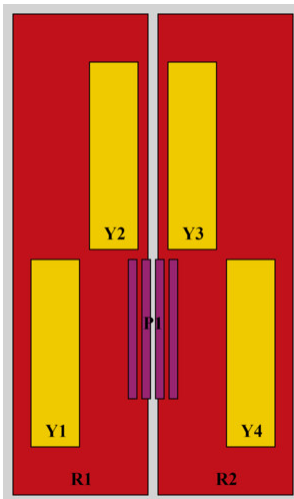
Net Weight, without mounting kit

52.5 kg | 115.743 lb

TDD Column Spacing

42 mm | 1.654 in

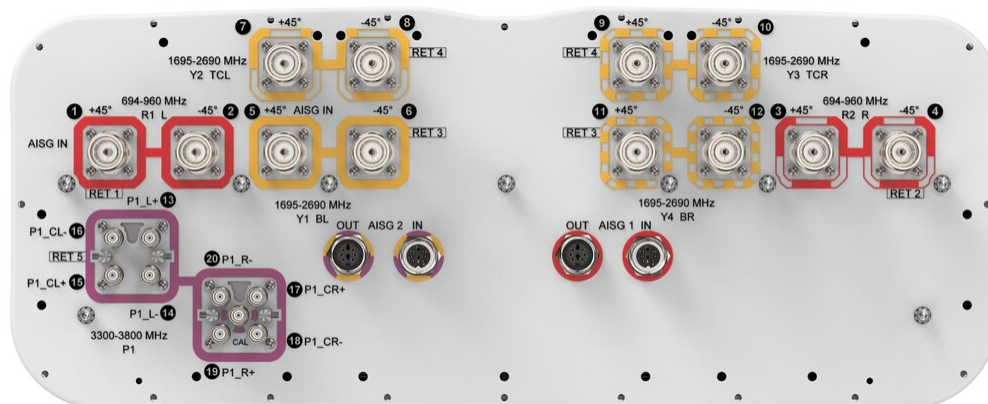
Array Layout



RF Connector	Array ID	Frequency (MHz)	RET (SRET)	AISG RET UID
1 - 2	R1	694-960	1	CPxxxxxxxxxxxxxxxxR1
3 - 4	R2	694-960	2	CPxxxxxxxxxxxxxxxxR2
5 - 6	Y1	1695-2690	3	CPxxxxxxxxxxxxxxxxY1
11 - 12	Y4	1695-2690	3	CPxxxxxxxxxxxxxxxxY1
7 - 8	Y2	1695-2690	4	CPxxxxxxxxxxxxxxxxY2
9 - 10	Y3	1695-2690	4	CPxxxxxxxxxxxxxxxxY2
13 - 20	P1	3300-3800	5	CPxxxxxxxxxxxxxxxxP1

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

Port Configuration



Electrical Specifications

RRV4S4-65D-R5

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 3300 – 3800 MHz 694 – 960 MHz
Polarization	±45°

Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1695–1920	1920–2180	2300–2500	2500–2690	3300–3800
Gain, dBi	16	16	16.5	17.1	17.5	17.9	17.6	16.2
Beamwidth, Horizontal, degrees	72	65	62	64	66	63	63	88
Beamwidth, Vertical, degrees	8.8	8	7.3	6.6	5.9	5.2	5	6.1
Beam Tilt, degrees	1–11	1–11	1–11	0–10	0–10	0–10	0–10	2–12
USLS (First Lobe), dB	18	19	21	20	20	20	17	15
Front-to-Back Ratio at 180°, dB	32	32	38	32	31	33	31	29
Coupling level, Amp, Antenna port to Cal port, dB								26
Coupling level, max Amp Δ, Antenna port to Cal port, dB								±2
Coupler, max Amp Δ, Antenna port to Cal port, dB								0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees								7
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25	25
Isolation, Inter-band, dB	28	28	28	25	25	25	25	25
Isolation, Co-polarization, dB								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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-145
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	200	75

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	880–960	1695–1920	1920–2180	2300–2500	2500–2690	3300–3800
Gain by all Beam Tilts, average, dBi	15.7	15.6	16.2	16.7	17	17.4	17	15.6
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.4	±0.5	±0.6	±0.7	±0.9	±0.7

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Beamwidth, Horizontal Tolerance, degrees	±6.2	±2.8	±3.1	±9	±6.8	±5.5	±4.9	±18.6
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.5	±0.4	±0.5	±0.4	±0.3	±0.3	±0.6
Front-to-Back Total Power at 180° ± 30°, dB	23	24	24	25	26	25	23	22
CPR at Boresight, dB	23	21	20	15	17	20	20	17
CPR at Sector, dB	13	10	14	10	9	9	8	8

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300–3800
Gain, dBi	16.7
Beamwidth, Horizontal, degrees	64
Beamwidth, Vertical, degrees	6.1
USLS (First Lobe), dB	17

Electrical Specifications, Service Beam

Frequency Band, MHz	3300–3800
Steered 0° Gain, dBi	21.1
Steered 0° Beamwidth, Horizontal, degrees	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	27
Steered 30° Gain, dBi	20.1
Steered 30° Beamwidth, Horizontal, degrees	29
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	29

Electrical Specifications, Soft Split

Frequency Band, MHz	3300–3800
Gain, dBi	20.1
Beamwidth, Horizontal, degrees	31
Front-to-Back Total Power at 180° ± 30°, dB	28

Mechanical Specifications

Wind Loading @ Velocity, frontal 1,041.0 N @ 150 km/h (234.0 lbf @ 150 km/h)

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Wind Loading @ Velocity, lateral	360.0 N @ 150 km/h (80.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,346.0 N @ 150 km/h (302.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	857.0 N @ 150 km/h (192.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2935 mm 115.551 in
Weight, gross	73.5 kg 162.04 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.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



Included Products

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.
BSAMNT-M4	-	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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