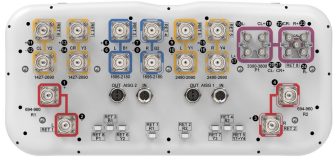


RRZZHHTTS4-65B-R8N



24-port sector antenna, 4x 694-960, 4x 1427-2690, 4x 1695-2180, 4x 2490-2690 MHz, 65° HPBW, and 8x 3300-3800 MHz, 90° HPBW, 8x RET

- Antenna includes 2x Single Column X-Pol Arrays for 694-960MHz and 2x Single Column X-Pol Arrays for 1427-2690MHz, suitable for 4x MIMO applications
- Includes 2x Single Column X-Pol Diplexed Arrays providing 4-Ports x 1695-2180MHz and 4 Ports x 2490-2690MHz, suitable for 4x MIMO applications
- Retractable tilt indicator rods
- Includes eight Internal RET's. All 2490-2690MHz (Y1&Y4) ports share common RET
- M-LOC cluster connector for 3.3-3.8GHz, equipped with calibration port
- Antenna shape optimized for wind load reduction

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	12
RF Connector Quantity, low band	4
RF Connector Quantity, total	24

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

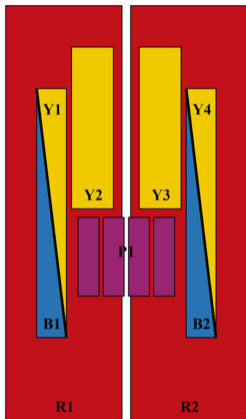
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Input Voltage	10–30 Vdc
Internal RET	High band (1) Low band (2) Mid band (5)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	430 mm 16.929 in
Depth	197 mm 7.756 in
Length	2100 mm 82.677 in
Net Weight, antenna only	41.2 kg 90.83 lb
TDD Column Spacing	42 mm 1.654 in

Array Layout

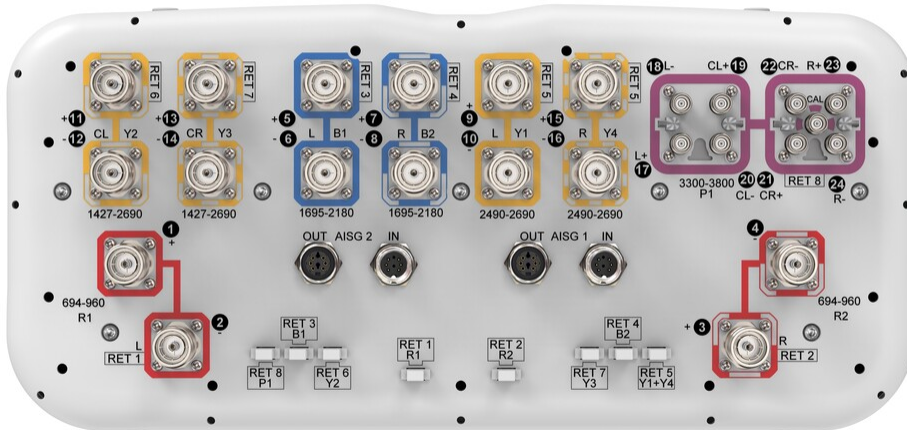


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxR2
B1	1695-2180	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxB2
Y1	2490-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxY1
Y4	2490-2690	15 - 16			
Y2	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxY2
Y3	1427-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxY3
P1	3300-3800	17 - 24	8	AISG1	CPxxxxxxxxxxxxxxxxP1

(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	1427 – 2690 MHz 1695 – 2180 MHz 2490 – 2690 MHz 3300 – 3800 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–2200	2300–2690	1695–2180	2490–2690	3300–3800
Gain, dBi	14.1	15	15	14.1	15.9	16.6	17.1	17.7	16
Beamwidth, Horizontal, degrees	70	60	59	69	63	61	69	64	82
Beamwidth, Vertical, degrees	10.6	9.5	8.7	9.9	7.6	6.2	5.2	4.2	6.1
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	20	19	18	13	18	20	19	21	16
Front-to-Back Ratio at 180°, dB	31	31	30	34	34	31	32	32	29
Coupling level, Amp, Antenna port to Cal port, dB									26
Coupling level, max Amp Δ, Antenna port to Cal port, dB									±2

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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	27	27	27	26	26	26	27	27	25
Isolation, Inter-band, dB	27	27	27	26	26	26	26	27	25
Isolation, Co-polarization, dB									19
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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153	-140
Input Power per Port at 50° C, maximum, watts	250	250	250	200	200	150	200	150	75

Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1427–1518	1695–2200	2300–2690	1695–2180	2490–2690	3300–3800
Gain by all Beam Tilts, average, dBi	13.6	14.6	14.6	13.7	15.3	16.2	16.6	17.4	15.3
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.4	±0.5	±1	±0.5	±0.7	±0.3	±0.8
Beamwidth, Horizontal Tolerance, degrees	±8.3	±4.6	±4.7	±7.3	±8.4	±4.1	±6.4	±2.5	±22.1
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.7	±0.4	±0.7	±0.9	±0.5	±0.4	±0.2	±0.6
USLS, beampeak to 20° above beampeak, dB	19.4	17.4	17.6	13.2	14.9	13.5	15.9	15	13.2
Front-to-Back Total Power at 180° ± 30°, dB	22	24	21	22	28	26	26	24	22
CPR at Boresight, dB	22	23	23	16	18	17	18	23	18

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	3300–3800
Gain, dBi	16.5
Beamwidth, Horizontal, degrees	57
Beamwidth, Vertical, degrees	6.1
Front-to-Back Total Power at 180° ± 30°, dB	24

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USLS (First Lobe), dB 17

Electrical Specifications, Service Beam

Frequency Band, MHz	3300–3800
Steered 0° Gain, dBi	20.8
Steered 0° Beamwidth, Horizontal, degrees	23
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	30
Steered 0° Horizontal Sidelobe, dB	15
Steered 30° Gain, dBi	19.6
Steered 30° Beamwidth, Horizontal, degrees	28
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	28

Electrical Specifications, Soft Split

Frequency Band, MHz	3300–3800
Gain, dBi	19.7
Beamwidth, Horizontal, degrees	31
Front-to-Back Total Power at 180° ± 30°, dB	28
Horizontal Sidelobe, dB	16

Mechanical Specifications

Wind Loading @ Velocity, frontal	495.0 N @ 150 km/h (111.3 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	253.0 N @ 150 km/h (56.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	745.0 N @ 150 km/h (167.5 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	316.0 N @ 150 km/h (71.0 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	530 mm 20.866 in
Depth, packed	349 mm 13.74 in

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Length, packed 2272 mm | 89.449 in

Weight, gross 53.5 kg | 117.947 lb

Regulatory Compliance/Certifications

Agency

CHINA-ROHS

ISO 9001:2015

REACH-SVHC

ROHS

UK-ROHS

Classification

Below maximum concentration value

Designed, manufactured and/or distributed under this quality management system

Compliant as per SVHC revision on www.commscope.com/ProductCompliance

Compliant

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