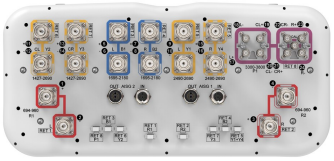
RRZZHHTTS4-65B-R8N



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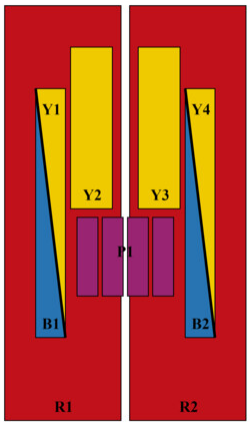
Input Voltage	10–30 Vdc
Internal RET	High band (1) | Low band (2) | Mid band (5)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

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	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
B1	1695-2180	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxB1
B2	1695-2180	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxB2
Y1	2490-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxY1
Y4	2490-2690	15 - 16			
Y2	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1427-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxY3
P1	3300-3800	17 - 24	8	AISG1	CPxxxxxxxxxxxxxxP1

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

Port Configuration

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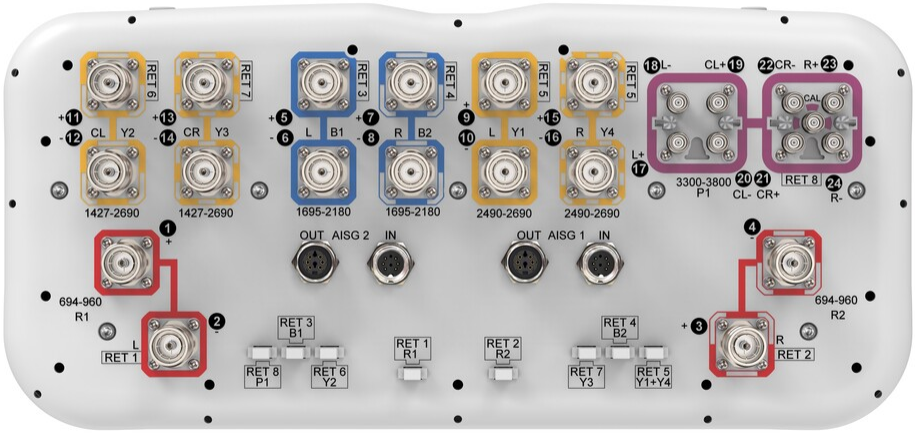

Electrical Specifications

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, 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
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	28

Total Power at 180° ± 30°, dB	

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
Length, packed	2272 mm | 89.449 in
Weight, gross	53.5 kg | 117.947 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/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