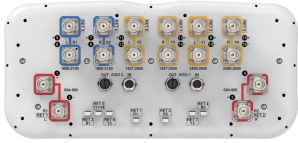


RRZZHHTT-65AR7N43F



16-port sector antenna, 4x 694–960, 4x 1427–2690, 4x 1695–2180 and 4x 2490–2690 MHz, 65° HPBW, 7x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and High band
- Retractable tilt indicator rods
- Antenna shape optimized for wind load reduction

General Specifications

Antenna Type	Sector
Band	Multiband
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
RF Connector Location	Bottom
RF Connector Quantity, mid band	12
RF Connector Quantity, low band	4
RF Connector Quantity, total	16

Remote Electrical Tilt (RET) Information

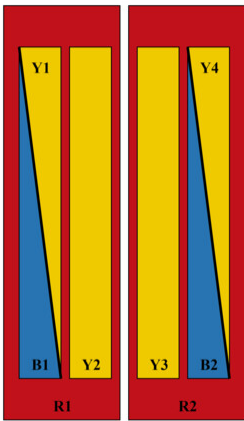
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) Mid band (5)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

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Dimensions

Width	430 mm 16.929 in
Depth	197 mm 7.756 in
Length	1599 mm 62.953 in
Net Weight, antenna only	33.2 kg 73.193 lb

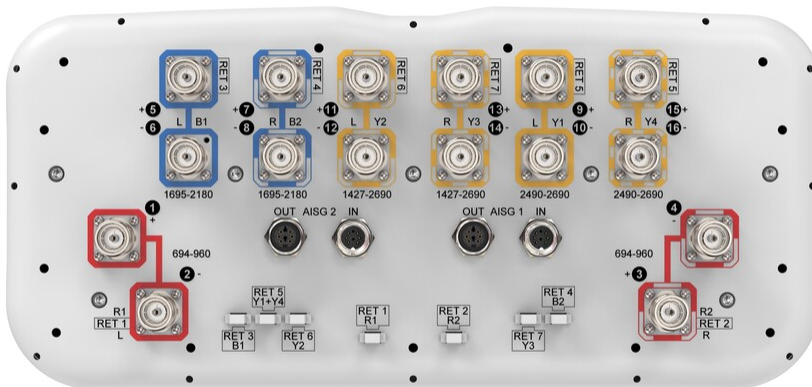
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxR2
B1	1695-2180	5 - 6	3	AISG1	CPxxxxxxxxxxxxB1
B2	1695-2180	7 - 8	4	AISG1	CPxxxxxxxxxxxxB2
Y1	2490-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxY1
Y4	2490-2690	15 - 16			
Y2	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxY2
Y3	1427-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxY3

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

Port Configuration



RRZZHHTT-65AR7N43F

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz 1695 – 2180 MHz 2490 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	Y2,Y3	B1,B2	B1,B2	Y1,Y4
Frequency Band, MHz	698–806	790–896	890–960	1427–1518	1695–1990	1920–2300	2300–2500	2490–2690	1695–1990	1920–2180	2490–2690	
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	11,12,13,14	11,12,13,14	11,12,13,14	11,12,13,14	11,12,13,14	11,12,13,14	5,6,7,8	5,6,7,8	9,10,15,16
Beamwidth, Horizontal, degrees	59	56	58	71	68	63	59	56	71	65	61	
Beamwidth, Vertical, degrees	13.4	12	11.2	7.8	6.2	5.6	5	4.7	6.1	5.6	4.7	
Beam Tilt, degrees	2–16	2–16	2–16	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	14	15	14	12	13	14	16	16	17	16	21	
Front-to-Back Ratio at 180°, dB	25	24	25	31	33	33	32	32	31	31	29	
Front-to-Back Total Power at 180° ± 30°, dB	18	19	21	23	26	26	27	27	24	24	22	
CPR at Boresight, dB	21	19	22	17	19	18	20	18	18	17	17	
CPR at Sector, dB	5	7	7	9	5	5	8	3	8	9	7	
Isolation, Cross Polarization, dB	26	26	26	26	26	26	26	26	27	27	27	
Isolation, Inter-band,	26	26	26	26	26	26	26	26	26	26	27	

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dB

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	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	250	200	200	250	250	150

Electrical Specifications, BASTA

Frequency Band, MHz	698-806790-896890-9601427-15181695-19901920-23002300-25002490-26901695-19901920-21802490-2690										
Gain by all Beam Tilts, average, dBi	13.3	13.5	13.8	14.6	16	17	17.9	17.8	15.8	16.5	16.8
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.6	±0.8	±0.5	±0.8	±0.9	±0.6	±0.9	±0.6	±0.7	±0.4
Beamwidth, Horizontal Tolerance, degrees	±8	±8	±8	±9	±6	±5	±4	±5	±4	±8	±5
Beamwidth, Vertical Tolerance, degrees	±1.2	±1	±0.7	±0.4	±0.5	±0.5	±0.3	±0.2	±0.5	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	14	15	14	12	13	14	16	15	13	14	14

Mechanical Specifications

Wind Loading @ Velocity, frontal	376.0 N @ 150 km/h (84.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	203.0 N @ 150 km/h (45.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	594.0 N @ 150 km/h (133.5 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	243.0 N @ 150 km/h (54.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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Packaging and Weights

Width, packed	530 mm 20.866 in
Depth, packed	349 mm 13.74 in
Length, packed	1771 mm 69.724 in
Weight, gross	43 kg 94.799 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



* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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