

RRZ4V4-65D-R10V3



20-port sector antenna, 4x694-960 (R1 & R2), 8x1427-2690 (Y3-Y6) and 8 x 1695-2690 MHz (Y1/Y2/Y7/Y8), 65° HPBW, 10xRET

- 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
- SEED® antenna providing high gain and improved efficiency
- High radiation and pattern efficiency for improved coverage area, capacity or reduced power consumption for a given area
- Reduces the amount of aluminum used to minimize CO2 release
- Retractable tilt indicator rods

General Specifications

Antenna Type	Sector
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	16
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 RET	Low band (2) Mid band (8)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

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Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2769 mm 109.016 in
Net Weight, without mounting kit	47.7 kg 105.16 lb

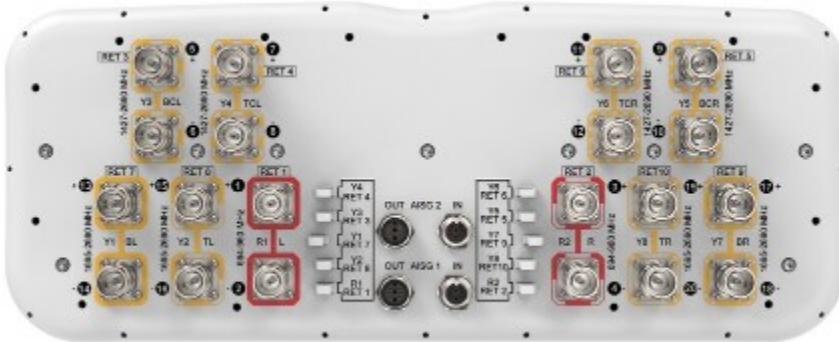
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxxR2
Y3	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxxY3
Y4	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxxY4
Y5	1427-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxxY5
Y6	1427-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxxxY6
Y1	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxxxY1
Y2	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxxxY2
Y7	1695-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxxxxxxY7
Y8	1695-2690	19 - 20	10	AISG1	CPxxxxxxxxxxxxxxxxxY8

Sizes of colored boxes are not true depictions of array sizes.

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz 1695 – 2690 MHz 694 – 960 MHz
Polarization	$\pm 45^\circ$
Total Input Power, maximum	1,600 W @ 50 °C

Electrical Specifications

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	R1,R2	R1,R2	R1,R2
Frequency Band, MHz	698–806	790–894	890–960
RF Port	1,2,3,4	1,2,3,4	1,2,3,4
Gain at Mid Tilt, dBi	16.3	16.7	17
Beamwidth, Horizontal, degrees	71	64	65
Beamwidth, Vertical, degrees	7.6	6.8	6.3
Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	18	21	20
Front-to-Back Ratio at 180°, dB	29	29	32
Isolation, Cross Polarization, dB	28	28	28
Isolation, Inter-band, dB	28	28	28
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300

Electrical Specifications

	Y1,Y7	Y1,Y7	Y1,Y7	Y1,Y7	Y2,Y8	Y2,Y8	Y2,Y8	Y2,Y8
Frequency Band, MHz	1695–1995	1920–2300	2300–2500	2490–2690	1695–1995	1920–2300	2300–2500	2490–2690
RF Port	13,14,17,18	13,14,17,18	13,14,17,18	13,14,17,18	15,16,19,20	15,16,19,20	15,16,19,20	15,16,19,20

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Gain at Mid Tilt, dBi	16.8	17.8	18.5	18.5	16.9	17.9	18.4	18.4
Beamwidth, Horizontal, degrees	72	64	57	60	71	63	56	59
Beamwidth, Vertical, degrees	6.9	6.1	5.3	5	6.5	5.7	5	4.7
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	16	17	18	14	14	14	20
Front-to-Back Ratio at 180°, dB	30	27	28	28	28	28	31	30
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25
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	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	200	200	250	250	200	200

Electrical Specifications

	Y3,Y5	Y3,Y5	Y3,Y5	Y3,Y5	Y3,Y5	Y4,Y6	Y4,Y6	Y4,Y6	Y4,Y6
Frequency Band, MHz	1427–1518 1695–1995 1920–2300 2300–2500 2490–2690 01427–1518 1695–1995 1920–2300 2300–2500 2490–2690								
RF Port	5,6,9,10	5,6,9,10	5,6,9,10	5,6,9,10	5,6,9,10	7,8,11,12	7,8,11,12	7,8,11,12	7,8,11,12
Gain at Mid Tilt, dBi	15.5	17.2	18.5	19.4	19.5	15.7	17.4	18.5	19.2
Beamwidth, Horizontal,	79	67	58	52	49	75	67	58	50

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degrees

Beamwidth, Vertical, degrees	8.3	7	6.1	5.3	5	7.8	6.5	5.7	5	4.7
Beam Tilt, degrees	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	12	17	16	18	17	19	17	16	18	22
Front-to-Back Ratio at 180°, dB	32	34	37	38	35	34	36	40	36	39
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25	25	25
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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	250	250	250	200	200	250	250	250	200	200

Mechanical Specifications

BASTA Version, mechanical	BASTA v12
Wind Loading @ Velocity, frontal	942.0 N @ 150 km/h (211.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	246.0 N @ 150 km/h (55.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,251.0 N @ 150 km/h (281.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	648.0 N @ 150 km/h (145.7 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	318 mm 12.52 in

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Length, packed 2890 mm | 113.78 in

Weight, gross 61 kg | 134.482 lb

Regulatory Compliance/Certifications

Agency	Classification
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UK-ROHS	Compliant
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Included Products

BSAMNT-2F	- Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
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* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance