RRZZV6-65D-R10F

20-port sector antenna, 4x694-960 (R1 & R2), 4x1427-2690 (Y3 & Y5) and 12 x 1695-2690 MHz (Y1/Y2/Y4/Y6/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
- 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	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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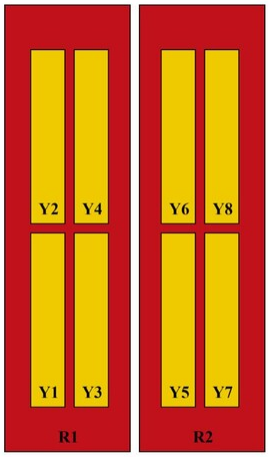
Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2688 mm | 105.827 in
Net Weight, antenna only	46.1 kg | 101.633 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxR2
Y3	1427-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxY3
Y5	1427-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxY5
Y1	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxY1
Y2	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxxY2
Y4	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxxY4
Y6	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxxY6
Y7	1695-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxxxxY7
Y8	1695-2690	19 - 20	10	AISG1	CPxxxxxxxxxxxxxxxY8

(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	±45°
Total Input Power, maximum	900 W @ 50 °C

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Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1,Y2,Y4,Y6,Y7,Y8
Frequency Band, MHz	**698–806**	**790–896**	**890–960**	**1695–1990**
RF Port	1,2,3,4	1,2,3,4	1,2,3,4	9 to 20
Gain at Mid Tilt, dBi	16.2	16.3	16.3	16.4
Beamwidth, Horizontal, degrees	67	62	63	70
Beamwidth, Vertical, degrees	8.5	7.6	7	7.3
Beam Tilt, degrees	2–13	2–13	2–13	2–12
USLS (First Lobe), dB	19	20	24	16
Front-to-Back Ratio at 180°, dB	35	31	31	34
Front-to-Back Total Power at 180° ± 30°, dB	23	22	22	29
CPR at Boresight, dB	31	24	24	23
CPR at Sector, dB	10	7	8	8
Isolation, Cross Polarization, dB	28	28	28	25
Isolation, Inter-band, dB	28	28	28	25
VSWR | Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	250	250	250	200

Electrical Specifications

	Y1,Y2,Y4,Y6,Y7,Y8	Y1,Y2,Y4,Y6,Y7,Y8	Y1,Y2,Y4,Y6,Y7,Y8	Y3,Y5
Frequency Band, MHz	**1920–2300**	**2300–2500**	**2490–2690**	**1427–1518**
RF Port	9 to 20	9 to 20	9 to 20	5,6,7,8
Gain at Mid Tilt, dBi	17.3	17.9	18.1	15.3
Beamwidth, Horizontal, degrees	62	56	56	66
Beamwidth, Vertical, degrees	6.5	5.7	5.3	9.2
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	17	20	21	17
Front-to-Back Ratio at 180°, dB	33	31	31	34
Front-to-Back Total Power at 180° ± 30°, dB	28	27	27	28
CPR at Boresight, dB	22	20	20	22
CPR at Sector, dB	6	6	4	9

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Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
VSWR | Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	200	200	200	200

Electrical Specifications

	Y3,Y5	**Y3,Y5**	**Y3,Y5**	**Y3,Y5**
Frequency Band, MHz	**1695–1990**	**1920–2300**	**2300–2500**	**2490–2690**
RF Port	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8
Gain at Mid Tilt, dBi	16.7	17.4	18	17.9
Beamwidth, Horizontal, degrees	62	55	52	53
Beamwidth, Vertical, degrees	7.5	6.8	6	5.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	16	16	16	17
Front-to-Back Ratio at 180°, dB	38	37	34	34
Front-to-Back Total Power at 180° ± 30°, dB	32	31	29	28
CPR at Boresight, dB	21	21	25	22
CPR at Sector, dB	8	5	6	2
Isolation, Cross Polarization, dB	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25
VSWR | Return loss, dB	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
Input Power per Port at 50°C, maximum, watts	200	200	200	200

Mechanical Specifications

Wind Loading @ Velocity, frontal	914.0 N @ 150 km/h (205.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	239.0 N @ 150 km/h (53.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,215.0 N @ 150 km/h (273.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	629.0 N @ 150 km/h (141.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

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Width, packed	565 mm | 22.244 in
Depth, packed	318 mm | 12.52 in
Length, packed	2809 mm | 110.591 in

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

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

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