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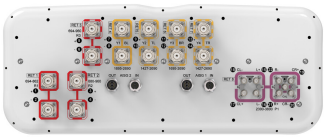

22-port sector antenna, 2 x 694-862 MHz (R1), 2 x 880-960 MHz (R2), 2 x 694-960 MHz (R3), 4 x 1427-2690 MHz (Y2, Y4) and 4 x 1695-2690 MHz (Y1, Y3) 65° HPBW, and 8 x 2300-3800 MHz (P1), 90° HPBW, 8 x RET

- Includes 1x 4-Column Array for 2300-3800MHz and calibration port. Column spacing optimized to support Soft Split Beamforming
- Q4 array uses M-LOC cluster connectors
- Eight internal RETs control the antenna arrays
- New aerodynamic endcaps for wind load optimization

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	8
RF Connector Quantity, low band	6
RF Connector Quantity, total	22

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

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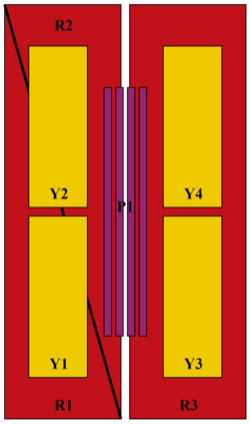
Internal RET	High band (1) | Low band (3) | Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2100 mm | 82.677 in
Net Weight, without mounting kit	50.3 kg | 110.892 lb
TDD Column Spacing	58 mm | 2.283 in

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-862	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	880-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
R3	694-960	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxR3
Y1	1695-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1427-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1427-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxY4
P1	2300-3800	15 - 22	8	AISG1	CPxxxxxxxxxxxxxxP1

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

Port Configuration

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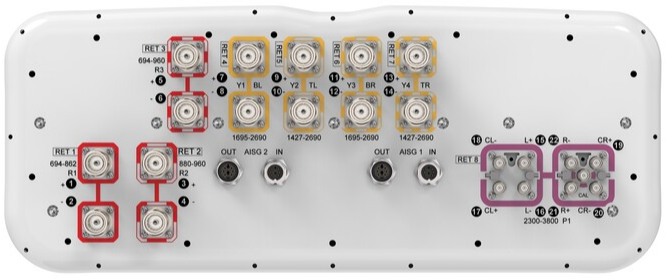

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 2690 MHz | 1695 – 2690 MHz | 2300 – 3800 MHz | 694 – 862 MHz | 694 – 960 MHz | 880 – 960 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**694–862**	**880–960**	**694–960**	**1427–1518**	**1695–2200**	**2300–2690**	**1695–2200**	**2300–2690**	**2300–2690**	**3400–3800**
Gain, dBi	14.9	15.1	15.8	14.9	16.7	17.3	16.2	17.4	15.6	16.7
Beamwidth, Horizontal, degrees	63	61	63	63	55	56	60	55	96	63
Beamwidth, Vertical, degrees	10.3	8.9	9.6	9.8	7.7	5.9	8.5	6.9	5.9	5.5
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	17	20	16	17	15	17	13	19	16	17
Front-to-Back Ratio	29	29	29	32	29	29	31	27	31	29

at 180°, dB										
Coupling level, Amp, Antenna port to Cal port, dB									26	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB									±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB									0.9	0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees									7	7
Isolation, Cross Polarization, dB	28	28	28	25	25	25	25	25	23	23
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25	25	25
Isolation, Co-polarization, dB									20	20
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	-150	-150	-150	-150	-150	-150	-150	-150	-140	-140
Input Power per Port at 50°C, maximum, watts	250	250	300	200	200	150	150	150	75	75

Electrical Specifications, BASTA

Frequency Band, MHz	**694–862**	**880–960**	**694–960**	**1427–1518**	**1695–2200**	**2300–2690**	**1695–2200**	**2300–2690**	**2300–2690**	**3400–3800**
Gain by all Beam Tilts, average, dBi	14.6	14.9	15.3	14.4	15.9	16.9	15.5	17	15.1	16
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.5	±0.6	±0.7	±0.4	±1	±0.5	±0.8	±0.8
Beamwidth, Horizontal Tolerance, degrees	±7	±3.5	±6.3	±6.6	±5.5	±3.7	±8.2	±4.8	±13.8	±13.5
Beamwidth, Vertical Tolerance, degrees	±1	±0.5	±1.3	±0.6	±1	±0.6	±1.1	±0.6	±0.4	±0.3
USLS, beampeak to 20° above beampeak, dB	17	17	15	14	14	15	13	15	11	12
Front-to-Back Total	21	22	21	24	24	24	25	23	24	24

Power at 180° ± 30°, dB										
CPR at Boresight, dB	18	19	18	19	19	16	16	20	16	15
CPR at Sector, dB	12	11	12	8	4	3	7	6	10	5

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**2300–2690**	**3400–3800**
Gain, dBi	17.7	17.5
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Vertical, degrees	5.9	5.4
Front-to-Back Total Power at 180° ± 30°, dB	29	25
USLS (First Lobe), dB	15	17

Electrical Specifications, Service Beam

Frequency Band, MHz	**2300–2690**	**3400–3800**
Steered 0° Gain, dBi	20.6	21.8
Steered 0° Beamwidth, Horizontal, degrees	25	18
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	32	30
Steered 0° Horizontal Sidelobe, dB	12	12
Steered 30° Gain, dBi	20.2	19.5
Steered 30° Beamwidth, Horizontal, degrees	28	23
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	31	26

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Electrical Specifications, Soft Split

Frequency Band, MHz	**2300–2690**
Gain, dBi	20
Beamwidth, Horizontal, degrees	31
Front-to-Back Total Power at 180° ± 30°, dB	31
Horizontal Sidelobe, dB	17

Mechanical Specifications

Wind Loading @ Velocity, frontal	728.0 N @ 150 km/h (163.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	223.0 N @ 150 km/h (50.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	873.0 N @ 150 km/h (196.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	501.0 N @ 150 km/h (112.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	368 mm | 14.488 in
Length, packed	2279 mm | 89.724 in
Weight, gross	64.1 kg | 141.316 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