RRYYHHTTS4-65AR7V4

24-port sector antenna, 4x 694–960, 4x 1427–1518, 4x 1695-2180, 4x 2490-2690 65° HPBW and 8x 3300-3800 MHz, 7x RET

- Integrated with a calibration board
- Optimized for Software Defined Split 6 Sector applications
- 2 columns for 694-960 MHz and 2 columns for 1427-1518 / 1695-2180 / 2490-2690 MHz and 4 columns for 3300-3800 MHz
- Seven internal RETs control the antenna arrays
- MQ4/MQ5 cluster connector for 3.3-3.8GHz, equipped with calibration port

This product will be discontinued on: December 31, 2025

General Specifications

Antenna Type	Sector and beamforming
Band	Multiband
Calibration Connector Interface	MQ5
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 | MQ4 | MQ5
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

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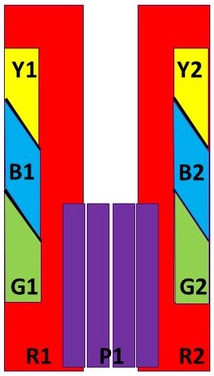
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (1) | Low band (2) | Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	1499 mm | 59.016 in
Net Weight, antenna only	37.8 kg | 83.335 lb
TDD Column Spacing	42 mm | 1.654 in

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxR2
G1	1427-1518	5-6	3	CPxxxxxxxxxxxxxxG1
G2	1427-1518	7-8		
B1	1695-2180	9-10	4	CPxxxxxxxxxxxxxxB1
B2	1695-2180	11-12	5	CPxxxxxxxxxxxxxxB2
Y1	2490-2690	13-14	6	CPxxxxxxxxxxxxxxY1
Y2	2490-2690	15-16		
P1	3300-3800	17-24	7	CPxxxxxxxxxxxxxxP1

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

Port Configuration

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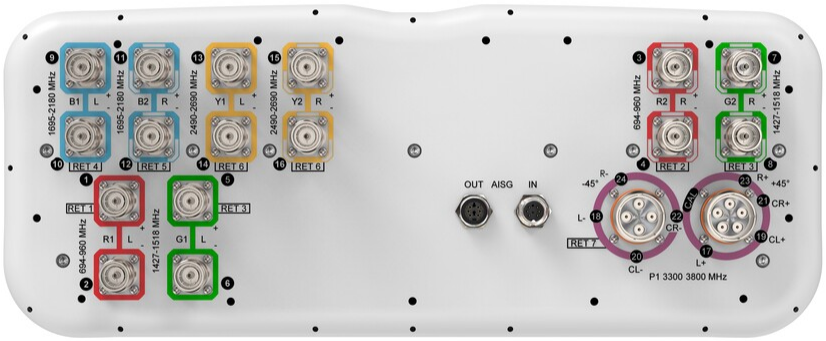

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1427 – 1518 MHz | 1695 – 2180 MHz | 2496 – 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**	**1695–2180**	**2490–2690**	**3300–3800**
Gain, dBi	13.4	13.5	13.8	14.9	15.9	16.8	15.9
Beamwidth, Horizontal, degrees	60	60	60	59	68	57	91
Beamwidth, Vertical, degrees	17.2	15.8	15	8.1	6.5	4.9	6.5
Beam Tilt, degrees	2–16	2–16	2–16	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	21	17	17	17	17	16	16
Front-to-Back Ratio at 180°, dB	30	29	29	31	29	30	28
Coupling level, Amp, Antenna port to Cal port, dB							26
Coupling level, max Amp Δ, Antenna port to Cal port, dB							±2

Coupler, max Amp Δ, Antenna port to Cal port, dB							0.9
Coupler, max Phase Δ, Antenna port to Cal port, degrees							7
CPR at Boresight, dB	20	19	19	13	18	16	15
Isolation, Cross Polarization, dB	26	26	26	25	25	25	25
Isolation, Inter-band, dB	26	26	26	28	28	28	28
Isolation, Co-polarization, dB							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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-130
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	150	75

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**3300–3800**
Gain, dBi	16.5
Beamwidth, Horizontal, degrees	63
Beamwidth, Vertical, degrees	6.6
USLS (First Lobe), dB	17

Electrical Specifications, Service Beam

Frequency Band, MHz	**3300–3800**
Steered 0° Gain, dBi	20.6
Steered 0° Beamwidth, Horizontal, degrees	24
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	27
Steered 0° Horizontal Sidelobe, dB	15
Steered 0° USLS (First Lobe), dB	17
Steered 30° Gain, dBi	19.7
Steered 30° Beamwidth, Horizontal, degrees	27
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	26

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Electrical Specifications, Soft Split

Frequency Band, MHz	**3300–3800**
Gain, dBi	19.6
Beamwidth, Horizontal, degrees	32
Front-to-Back Total Power at 180° ± 30°, dB	26
Horizontal Sidelobe, dB	19
USLS (First Lobe), dB	18

Mechanical Specifications

Wind Loading @ Velocity, frontal	498.0 N @ 150 km/h (112.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	148.0 N @ 150 km/h (33.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	597.0 N @ 150 km/h (134.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	342.0 N @ 150 km/h (76.9 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	309 mm | 12.165 in
Length, packed	1686 mm | 66.378 in
Weight, gross	50.7 kg | 111.774 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

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