EEGGV4Q4Q465DR10

32-port sector antenna, 4 x 694-862 MHz (R1,R3), 4 x 880-960 MHz (R2,R4), and 8 x 1695-2690 MHz (Y1-Y4) 65° HPBW, 16 x 2300-3800 MHz (P1,P2), 90° HPBW, 10 x RET

- Two broadband beamforming arrays for 2300-2690 MHz or 3300-3800 MHz, each with a calibration port
- Design for site sharing for both FDD and TDD applications
- New aerodynamic endcaps for wind load optimization
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

General Specifications

Antenna Type	Sector and beamforming
Band	Multiband
Calibration Connector Interface	MQ5
Calibration Connector Quantity	2
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	16
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	8
RF Connector Quantity, total	32

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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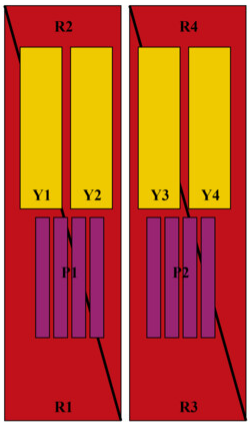
Internal RET	High band (2) | Low band (4) | Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2688 mm | 105.827 in
Net Weight, antenna only	74.3 kg | 163.803 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-862	1 - 2	1	AISG2	CPxxxxxxxxxxxxxxR1
R2	880-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxR2
R3	694-862	5 - 6	3	AISG2	CPxxxxxxxxxxxxxxR3
R4	880-960	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxR4
Y1	1695-2690	9 - 10	5	AISG2	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	11 - 12	6	AISG2	CPxxxxxxxxxxxxxxY2
Y3	1695-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1695-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxxxY4
P1	2300-3800	17 - 24	9	AISG2	CPxxxxxxxxxxxxxxP1
P2	2300-3800	25 - 32	10	AISG1	CPxxxxxxxxxxxxxxP2

(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	1695 – 2690 MHz | 2300 – 3800 MHz | 694 – 862 MHz | 880 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,600 W @ 50 °C

Electrical Specifications

	R1,R3	R2,R4	Y1-Y4	Y1-Y4	Y1-Y4	P1,P2	P1,P2
Frequency Band, MHz	**694–862**	**880–960**	**1695–1920**	**1920–2200**	**2300–2690**	**2300–2690**	**3300–3800**
RF Port	1,2,5,6	3,4,7,8	9-16	9-16	9-16	17-32	17-32
Gain at Mid Tilt, dBi	15.2	15.4	16.3	17.6	17.9	14.7	15.8
Beamwidth, Horizontal, degrees	62	60	71	62	58	92	69
Beamwidth, Vertical, degrees	8.8	7.6	6.3	5.6	4.8	5.9	5.5
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	19	18	18	21	11	14
Front-to-Back Ratio at 180°, dB	29	29	33	32	32	28	29
Front-to-Back Total Power at 180° ± 30°, dB	21	22	26	27	27	20	21
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	25	25	25	23	23
Isolation, Inter-band, dB	28	28	25	25	25	25	25
Isolation, Co-polarization, dB						18	18
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	-130	-130
Input Power per Port at 50°C, maximum, watts	250	250	250	250	200	75	75

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Electrical Specifications, Broadcast 65°

Frequency Band, MHz	2300–2690	3300–3800
Gain, dBi	17.5	17.1
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Horizontal at 10 dB, degrees	114	112
Beamwidth, Vertical, degrees	5.9	5.5
Front-to-Back Total Power at 180° ± 30°, dB	24	24
USLS (First Lobe), dB	12	14

Electrical Specifications, Envelope Pattern

Frequency Band, MHz	2300–2690	3300–3800
Gain, dBi	20.2	21.3
Beamwidth, Horizontal at 10 dB, degrees	126	121
Beamwidth, Vertical at 3 dB, degrees	5.9	5.5
Front-to-Back Total Power at 180° ± 30°, dB	25	25
USLS (First Lobe), dB	12	15

Electrical Specifications, Service Beam

Frequency Band, MHz	2300–2690	3300–3800
Steered 0° Gain, dBi	20.2	21.4
Steered 0° Beamwidth, Horizontal, degrees	26	18
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	27	29
Steered 0° Horizontal Sidelobe, dB	12	10
Steered 30° Gain, dBi	19.4	19.5
Steered 30° Beamwidth, Horizontal, degrees	28	21
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	26	25

Electrical Specifications, Soft Split

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Frequency Band, MHz	**2300–2690**
Gain, dBi	19.2
Beamwidth, Horizontal, degrees	32
Front-to-Back Total Power at 180° ± 30°, dB	27
Horizontal Sidelobe, dB	15

Mechanical Specifications

Wind Loading @ Velocity, frontal	970.0 N @ 150 km/h (218.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	304.0 N @ 150 km/h (68.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,162.0 N @ 150 km/h (261.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	667.0 N @ 150 km/h (149.9 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	318 mm | 12.52 in
Length, packed	2809 mm | 110.591 in
Weight, gross	95.8 kg | 211.203 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
UK-ROHS	Compliant/Exempted

Included Products

BSAMNT-4	–	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.
BSAMNT-M4	–	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance