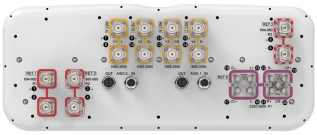
EGRV4Q4-65D-R8



22-port sector antenna, 2 x 694-862 MHz (R1), 2 x 880-960 MHz (R2), 2 x 694-960 MHz (R3), and 8 x 1695-2690 MHz (Y1-Y4) 65° HPBW, 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

This product will be discontinued on: November 30, 2024

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

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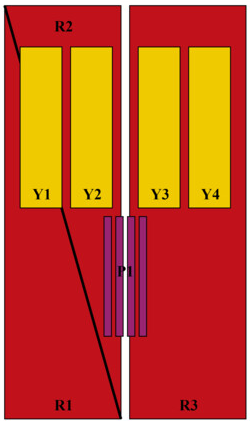
RET Interface, quantity	2 female | 2 male
Input Voltage	10–30 Vdc
Internal RET	High band (1) | Low band (3) | Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2688 mm | 105.827 in
Net Weight, without mounting kit	60.6 kg | 133.6 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	1695-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1695-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1695-2690	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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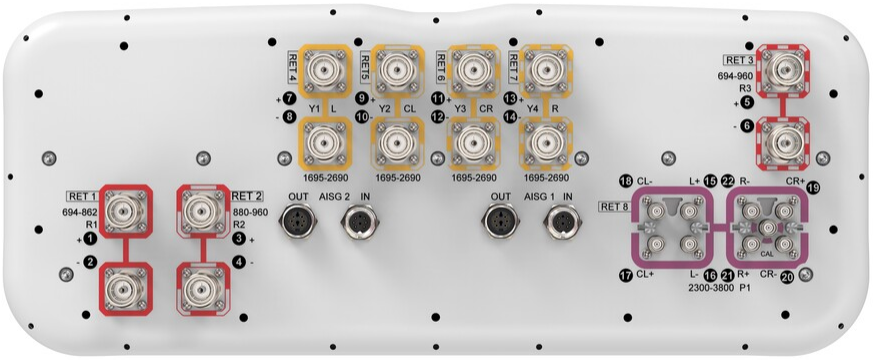

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	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**	**1695–1920**	**1920–2200**	**2300–2690**	**2300–2690**	**3400–3800**
Gain, dBi	16	16.4	16.3	16	17.2	17.8	15.9	16.6
Beamwidth, Horizontal, degrees	68	63	66	69	63	59	85	63
Beamwidth, Vertical, degrees	8.6	7.4	8.1	7.3	6.5	5.4	6	5.1
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	16	16	16	16	14	14
Front-to-Back Ratio at 180°, dB	31	32	31	31	31	31	30	27
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							0.9	0.9

port to Cal port, dB								
Coupler, max Phase Δ, Antenna port to Cal port, degrees							7	7
Isolation, Cross Polarization, dB	28	28	28	25	25	25	23	23
Isolation, Inter-band, dB	28	28	28	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-140	-140
Input Power per Port at 50°C, maximum, watts	250	250	300	200	200	150	75	75

Electrical Specifications, BASTA

Frequency Band, MHz	**694–862**	**880–960**	**694–960**	**1695–1920**	**1920–2200**	**2300–2690**	**2300–2690**	**3400–3800**
Gain by all Beam Tilts, average, dBi	15.5	15.9	15.7	15.5	16.6	17.3	15.2	16.1
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.7	±0.7	±0.5	±0.8	±0.6	±1.1	±0.9
Gain by Beam Tilt, average, dBi	2 ° | 15.4 7 ° | 15.6 12 ° | 15.4	2 ° | 15.8 7 ° | 16.0 12 ° | 15.7	2 ° | 15.5 7 ° | 15.8 12 ° | 15.5	2 ° | 15.4 7 ° | 15.7 12 ° | 15.4	2 ° | 16.4 7 ° | 16.8 12 ° | 16.4	2 ° | 17.0 7 ° | 17.5 12 ° | 17.0	2 ° | 15.0 7 ° | 15.3 12 ° | 15.2	2 ° | 15.6 7 ° | 16.2 12 ° | 16.2
Beamwidth, Horizontal Tolerance, degrees	±7	±3	±7.1	±4.7	±6	±6	±19	±10.4
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.4	±1.6	±0.5	±0.6	±0.4	±0.5	±0.3
USLS, beampeak to 20° above beampeak, dB	17	18	17	15	16	16	11	12
Front-to-Back Total Power at 180° ± 30°, dB	22	23	22	26	25	26	23	23
CPR at Boresight, dB	20	19	19	20	21	21	16	16
CPR at Sector, dB	10	12	11	7	6	4	8	5

Electrical Specifications, Broadcast 65°

Frequency Band, MHz							**2300–2690**	**3400–3800**
Gain, dBi							18.2	17.1
Beamwidth, Horizontal, degrees							25	75
Beamwidth, Vertical, degrees							5.8	5.1
Front-to-Back Total Power at 180° ± 30°, dB							27	23

USLS (First Lobe), dB	15	14

Electrical Specifications, Envelope Pattern

Frequency Band, MHz	**2300–2690**	**3400–3800**
Gain, dBi	20.5	21.9
Beamwidth, Horizontal at 10 dB, degrees	125	120
Beamwidth, Vertical at 3 dB, degrees	5.9	5.1
Front-to-Back Total Power at 180° ± 30°, dB	27	27
USLS (First Lobe), dB	15	15

Electrical Specifications, Service Beam

Frequency Band, MHz	**2300–2690**	**3400–3800**
Steered 0° Gain, dBi	20.5	21.9
Steered 0° Beamwidth, Horizontal, degrees	24	18
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	30	29
Steered 0° Horizontal Sidelobe, dB	12	13
Steered 30° Gain, dBi	20	19.8
Steered 30° Beamwidth, Horizontal, degrees	28	22
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	29	25

Electrical Specifications, Soft Split

Frequency Band, MHz	**2300–2690**
Gain, dBi	19.8
Front-to-Back Total Power at 180° ± 30°, dB	29
Horizontal Sidelobe, dB	19

Mechanical Specifications

Wind Loading @ Velocity, frontal	944.0 N @ 150 km/h (212.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	292.0 N @ 150 km/h (65.6 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,130.0 N @ 150 km/h (254.0 lbf @ 150 km/h)

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Wind Loading @ Velocity, rear	650.0 N @ 150 km/h (146.1 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	2874 mm | 113.15 in
Weight, gross	82.2 kg | 181.22 lb

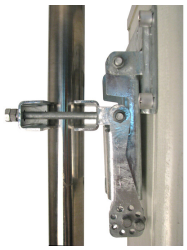
Included Products

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

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.

Product Classification

Product Type	Downtilt mounting kit

General Specifications

Application	Outdoor
Color	Silver

Dimensions

Compatible Diameter, maximum	115 mm | 4.528 in
Compatible Diameter, minimum	60 mm | 2.362 in
Weight, net	6.5 kg | 14.33 lb

Material Specifications

Material Type	Galvanized steel

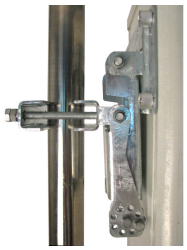
Packaging and Weights

Included	Brackets | Hardware
Packaging quantity	1

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

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.

Product Classification

Product Type	Downtilt mounting kit

General Specifications

Application	Outdoor
Color	Silver

Dimensions

Compatible Diameter, maximum	115 mm | 4.528 in
Compatible Diameter, minimum	60 mm | 2.362 in
Weight, net	4.6 kg | 10.141 lb

Material Specifications

Material Type	Galvanized steel

Packaging and Weights

Included	Brackets | Hardware
Packaging quantity	1

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