12P-4L8M-A6-V7

12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET

- 2L4H band arrays are perfectly symmetrical inside the antenna ensuring pattern consistency across ports & provides capability for 4T4R (4x MIMO) on Low band and High band
- Symmetrical Low & High band arrays with consistent electrical performance
- Antenna with integrated pluggable RET

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
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (1) | Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

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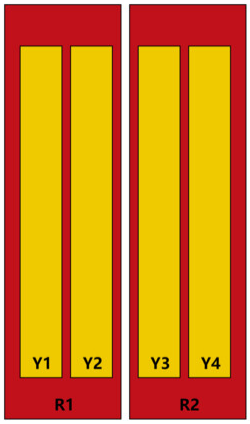
Dimensions

Width	499 mm | 19.646 in
Depth	199 mm | 7.835 in
Length	1490 mm | 58.661 in
Net Weight, antenna only	20.7 kg | 45.636 lb

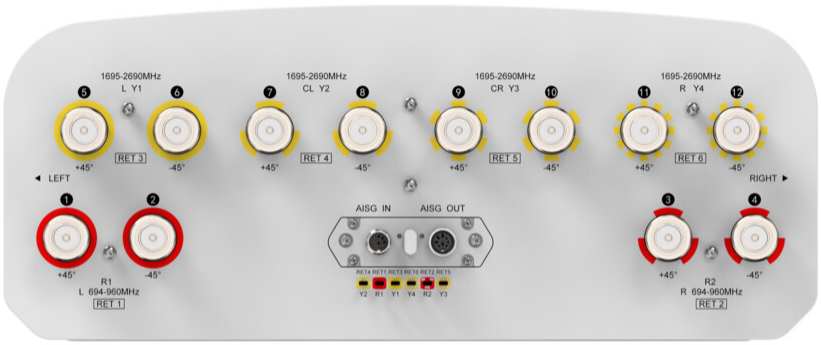
Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	RET UID
R1	694-960	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	65°	5	AISG1	CPxxxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	65°	6	AISG1	CPxxxxxxxxxxxxxxY4

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

Port Configuration



12P-4L8M-A6-V7

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz | 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W

Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	**694–806**	**790–896**	**880–960**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2490**	**2500–2690**
RF Port	1-4	1-4	1-4	5-12	5-12	5-12	5-12	5-12
Gain, dBi	14.8	14.9	15.2	17.1	17.3	17.8	18.2	18.3
Beamwidth, Horizontal, degrees	63	60	58	69	67	66	60	57
Beamwidth, Vertical, degrees	11	9.8	9	6.2	5.9	5.6	4.8	4.1
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	16	16
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	25	25	25	25	25	25	25	25
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25
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	-150	-150
Input Power per Port, maximum, watts	250	250	250	200	200	200	200	200

Electrical Specifications, BASTA

Frequency Band, MHz	**694–806**	**790–896**	**880–960**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2490**	**2500–2690**
Gain by all Beam Tilts, average, dBi	14.6	14.8	15	16.9	17.2	17.5	17.8	18
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.4	±0.2	±0.7	±0.5	±0.6	±0.4	±0.7
Beamwidth, Horizontal Tolerance, degrees	±5	±4	±5	±7	±4	±6	±5	±7
Beamwidth, Vertical Tolerance, degrees	±1.1	±1	±0.7	±0.4	±0.3	±0.5	±0.3	±0.2
CPR at Boresight, dB	19	19	19	19	19	19	19	19

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Mechanical Specifications

Wind Loading @ Velocity, frontal	422.0 N @ 150 km/h (94.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	197.0 N @ 150 km/h (44.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	748.0 N @ 150 km/h (168.2 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h (124 mph)

Packaging and Weights

Width, packed	574 mm | 22.598 in
Depth, packed	274 mm | 10.787 in
Length, packed	1670 mm | 65.748 in
Weight, gross	29 kg | 63.934 lb

Regulatory Compliance/Certifications

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

Included Products

BSAMNT-B95-01	–	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