

J4H4-65A-R6



16-port, low band diplexed antenna, 4x 698-728 MHz, 4x758-798 MHz and 8 x 1695-2360 MHz, 65° HPBW, 6 x RET

- Features broadband Low Band (698-798 MHz) and Mid Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for B29 and B14, AWS, PCS and WCS applications
- Both Low Band arrays are diplexed to provide independent tilt for B29 and B14
- Excellent wind loading characteristics
- Optimized SPR performance across all operating bands

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	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	8
RF Connector Quantity, total	16

Remote Electrical Tilt (RET) Information

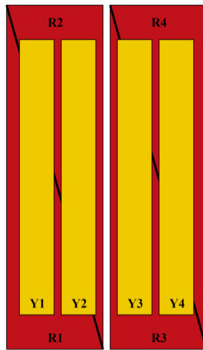
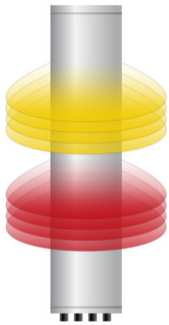
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

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Dimensions

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	1499 mm 59.016 in
Net Weight, antenna only	37.4 kg 82.453 lb

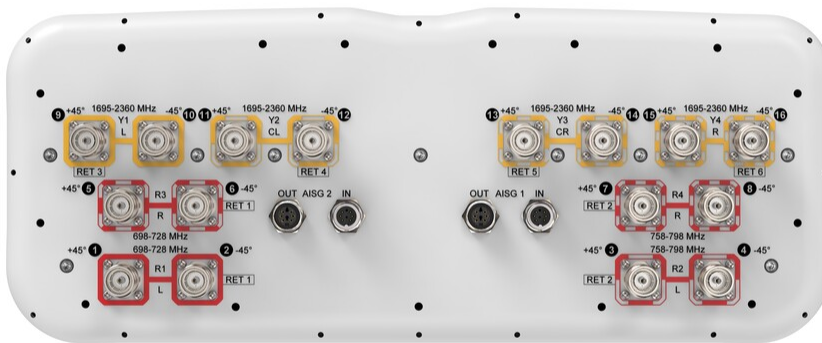
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID
R1	698-728	1 - 2	1	AISG1	CPxxxxxxxxxxxxMM.1
R3	698-728	5 - 6			
R2	758-798	3 - 4	2	AISG1	CPxxxxxxxxxxxxMM.2
R4	758-798	7 - 8			
Y1	1695-2360	9 - 10	3	AISG1	CPxxxxxxxxxxxxMM.3
Y2	1695-2360	11 - 12	4	AISG1	CPxxxxxxxxxxxxMM.4
Y3	1695-2360	13 - 14	5	AISG1	CPxxxxxxxxxxxxMM.5
Y4	1695-2360	15 - 16	6	AISG1	CPxxxxxxxxxxxxMM.6

(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 – 2360 MHz 698 – 798 MHz
Polarization	±45°
Total Input Power, maximum	1,280 W @ 50 °C

Electrical Specifications

	R1-R3	R2-R4	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	698–728	758–798	1695–1880	1850–1990	1920–2180	2300–2360
RF Port	1,2,5,6	3,4,7,8	9,10,11,12,13,14,15,16	9,10,11,12,13,14,15,16	9,10,11,12,13,14,15,16	9,10,11,12,13,14,15,16
Gain, dBi	12.3	12.8	16	16.8	17.5	18.2
Beamwidth, Horizontal, degrees	77	69	72	69	63	58
Beamwidth, Vertical, degrees	17.4	16	7.5	7	6.6	5.9
Beam Tilt, degrees	2–16	2–16	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	17	15	17	18	20
Front-to-Back Ratio at 180°, dB	31	30	33	35	36	36
Front-to-Back Total Power at 180° ± 30°, dB	22	22	25	25	27	29
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	150	150	250	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	698–728	758–798	1695–1880	1850–1990	1920–2180	2300–2360
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Gain by all Beam Tilts, average, dBi	12.1	12.6	15.9	16.6	17.3	17.9
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±1	±0.7	±0.8	±0.8
Beamwidth, Horizontal Tolerance, degrees	±3	±6.5	±7.7	±9.5	±6.7	±3.1
Beamwidth, Vertical Tolerance, degrees	±0.8	±0.8	±0.5	±0.4	±0.5	±0.2
USLS, beampeak to 20° above beampeak, dB	19	17	12	14	15	12
CPR at Boresight, dB	21	22	20	21	20	20
CPR at Sector, dB	15	11	7	6	6	4

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.47 m ² 5.059 ft ²
Effective Projective Area (EPA), lateral	0.14 m ² 1.507 ft ²
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	50.4 kg 111.113 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



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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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance