JJAAH4-65C-R6

8 ft, 16-port, low band diplexed antenna, 4 x 698-798 MHz, 4 x 824-894 MHz and 8 x 1695-2360 MHz, 65° HPBW, 6 x RET

- Features broadband Low Band (698-894 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for 700 and 850 MHz, AWS, PCS and WCS applications
- The Low Band array is diplexed, providing independent tilt for the 700 and 850 MHz bands for 4T4R (4X MIMO) capability allowing the antenna to be used with 700 MHz and 850 MHz radios simultaneously
- 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

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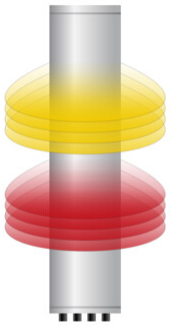
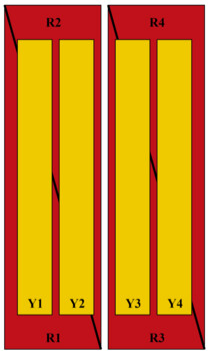
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2438 mm | 95.984 in
Net Weight, antenna only	57.2 kg | 126.104 lb

Array Layout

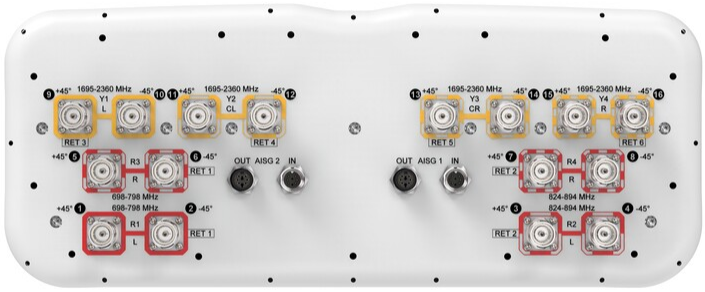




Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID
R1	698-798	1 - 2	1	AISG1	CPxxxxxxxxxxxxMM.1
R3	698-798	5 - 6			
R2	824-894	3 - 4	2	AISG1	CPxxxxxxxxxxxxMM.2
R4	824-894	7 - 8			
Y1	1695-2360	9 - 10	3	AISG1	CPxxxxxxxxxxxxMM.3
Y2	1695-2360	11 - 12	4	AISG1	CPxxxxxxxxxxxxMM.4
Y3	1695-2360	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 | 824 – 894 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	**698–798**	**824–894**	**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	14.7	15.1	17	17.8	18.4	18.9
Beamwidth, Horizontal, degrees	60	61	69	68	62	58
Beamwidth, Vertical, degrees	9.3	8.2	5.6	5.2	4.9	4.4
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	17	17	18	19	19
Front-to-Back Ratio at 180°, dB	31	29	35	35	34	35
Front-to-Back Total Power at 180° ± 30°, dB	22	24	27	28	27	28
CPR at Boresight, dB	20	20	22	23	23	21
CPR at Sector, dB	11	10	7	8	7	8
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

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Electrical Specifications, BASTA

Frequency Band, MHz	698–798	824–894	1695–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	14.7	15	16.9	17.7	18.3	18.7
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.7	±0.5	±0.6	±0.3
Beamwidth, Horizontal Tolerance, degrees	±4.9	±6.7	±8.6	±7.1	±5.6	±2.9
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.4	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	17	16	15	17	18	17

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.81 m² | 8.719 ft²
Effective Projective Area (EPA), lateral	0.25 m² | 2.691 ft²
Wind Loading @ Velocity, frontal	865.0 N @ 150 km/h (194.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,037.0 N @ 150 km/h (233.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	595.0 N @ 150 km/h (133.8 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	2685 mm | 105.709 in
Weight, gross	77.1 kg | 169.976 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-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.
BSAMNT-M	–	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