

# J3AH4-65B-R6



16-port, low band diplexed antenna, 2x 698-728 MHz, 2x758-798 MHz, 2 x 698-798 MHz, 2 x 824-894 MHz and 8 x 1695-2360 MHz, 65° HPBW, 6 x RET

- Features broadband Low Band (698-894 MHz) and Mid Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for 700 and 850 MHz, AWS, PCS and WCS applications
- Both Low Band arrays are diplexed for independent tilt, with one array providing two ports of B29 and two ports of B14 and the other array providing two ports of B14 and two ports of B5
- Excellent wind loading characteristics
- Optimized SPR performance across all operating bands

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	8
<b>RF Connector Quantity, low band</b>	8
<b>RF Connector Quantity, total</b>	16

## Remote Electrical Tilt (RET) Information

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

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**Protocol** 3GPP/AISG 2.0 (Multi-RET)

## Dimensions

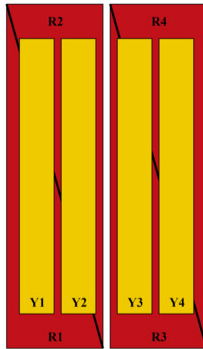
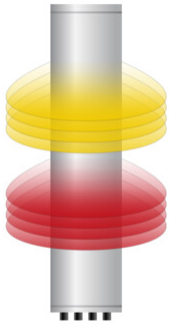
**Width** 498 mm | 19.606 in

**Depth** 197 mm | 7.756 in

**Length** 1828 mm | 71.969 in

**Net Weight, antenna only** 43.6 kg | 96.121 lb

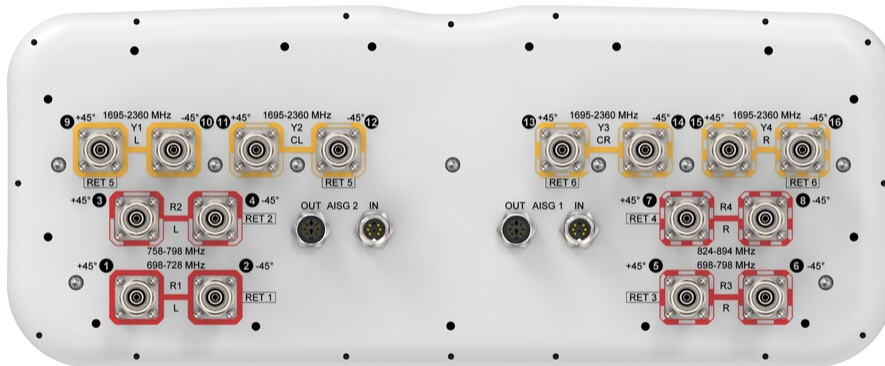
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID
R1	698-728	1 - 2	1	AISG1	CPxxxxxxxxxxxxMM.1
R2	758-798	3 - 4	2	AISG1	CPxxxxxxxxxxxxMM.2
R3	698-798	5 - 6	3	AISG1	CPxxxxxxxxxxxxMM.3
R4	824-894	7 - 8	4	AISG1	CPxxxxxxxxxxxxMM.4
Y1	1695-2360	9 - 10	5	AISG1	CPxxxxxxxxxxxxMM.5
Y2	1695-2360	11 - 12			
Y3	1695-2360	13 - 14	6	AISG1	CPxxxxxxxxxxxxMM.6
Y4	1695-2360	15 - 16			

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

## Port Configuration



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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2360 MHz   698 – 798 MHz   824 – 894 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,280 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	698–798	824–896	1695–1880	1850–1990	1920–2180	2300–2360
<b>Beamwidth, Horizontal, degrees</b>	64	61	70	67	62	60
<b>Beamwidth, Vertical, degrees</b>	12.1	11	7	6.4	6.1	5.5
<b>Beam Tilt, degrees</b>	2–14	2–14	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	15	18	17	18	18	18
<b>Front-to-Back Ratio at 180°, dB</b>	31	29	34	34	33	35
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	24	24	28	27	27	28
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	150	150	250	250	250	200

## Electrical Specifications, BASTA

Frequency Band, MHz	698–798	824–896	1695–1880	1850–1990	1920–2180	2300–2360
<b>Gain by all Beam Tilts, average, dBi</b>	13.6	14.4	16.1	16.8	17.3	17.7
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.3	±0.8	±0.8	±0.8	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±9.9	±6.3	±7.8	±10.3	±5.8	±4.3
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.9	±0.6	±0.4	±0.3	±0.4	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	17	12	14	12	11
<b>CPR at Boresight, dB</b>	23	26	21	22	23	22

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CPR at Sector, dB                      11                      9                      6                      5                      5                      6

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	622.0 N @ 150 km/h (139.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	188.0 N @ 150 km/h (42.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	746.0 N @ 150 km/h (167.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	428.0 N @ 150 km/h (96.2 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
<b>Depth, packed</b>	309 mm   12.165 in
<b>Length, packed</b>	2015 mm   79.331 in
<b>Weight, gross</b>	57.4 kg   126.545 lb

## Regulatory Compliance/Certifications

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

## 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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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