

# J3AH4-65A-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>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	0
<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)

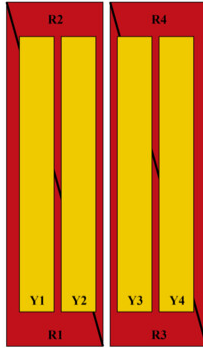
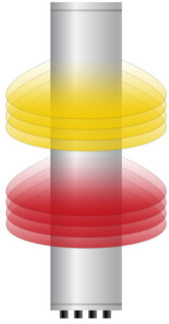
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<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Multi-RET)

## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1499 mm   59.016 in
<b>Net Weight, antenna only</b>	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
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

	<b>R1-R3</b>	<b>R4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>
<b>Frequency Band, MHz</b>	<b>698–798</b>	<b>824–894</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2180</b>	<b>2300–2360</b>
<b>RF Port</b>	1-6	7,8	9-16	9-16	9-16	9-16
<b>Gain, dBi</b>	12.5	13.2	15.9	16.7	17.4	18.1
<b>Beamwidth, Horizontal, degrees</b>	75	68	70	68	62	59
<b>Beamwidth, Vertical, degrees</b>	16.9	14.2	7.5	7	6.6	5.9
<b>Beam Tilt, degrees</b>	2–16	2–16	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	18	19	14	18	19	23
<b>Front-to-Back Ratio at 180°, dB</b>	29	29	32	34	35	35
<b>Front-to-Back Total Power at</b>	29	29	28	29	30	32

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180° ± 30°, dB

CPR at Boresight, dB	20	23	21	23	24	24
CPR at Sector, dB	11	12	8	7	6	6
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

## Mechanical Specifications

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	241.4 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
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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

BSAMNT-4 – Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members.

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Kit contains one scissor top bracket set and one bottom bracket set.

## \* Footnotes

### **Performance Note**

Severe environmental conditions may degrade optimum performance