

# J4H4-65B-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

<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, mid band</b>	8
<b>RF Connector Quantity, low band</b>	8
<b>RF Connector Quantity, total</b>	16

## Remote Electrical Tilt (RET) Information

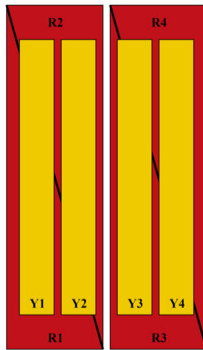
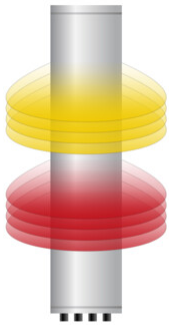
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (4)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum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

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## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1828 mm   71.969 in
<b>Net Weight, antenna only</b>	44.5 kg   98.106 lb

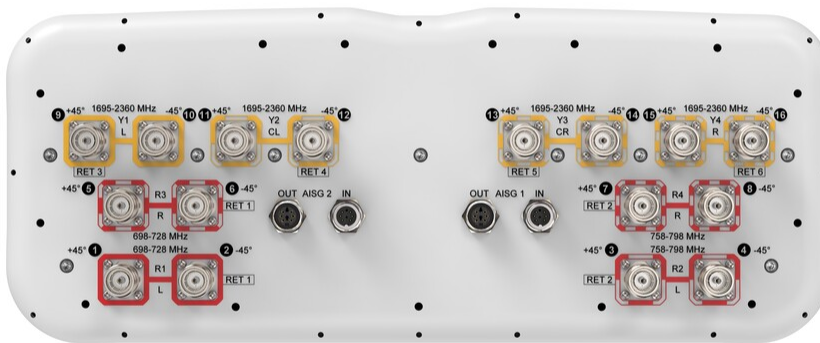
## Array Layout



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

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

## Electrical Specifications

	<b>R1,R3</b>	<b>R2,R4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>	<b>Y1-Y4</b>
<b>Frequency Band, MHz</b>	<b>698–728</b>	<b>758–798</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2180</b>	<b>2300–2360</b>
<b>RF Port</b>	1,2,5,6	3,4,7,8	9-16	9-16	9-16	9-16
<b>Gain at Mid Tilt, dBi</b>	13.4	13.9	16.4	17	17.6	18
<b>Beamwidth, Horizontal, degrees</b>	64	58	69	67	62	60
<b>Beamwidth, Vertical, degrees</b>	12.5	11.6	6.9	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>	16	16	15	17	19	18
<b>Front-to-Back Ratio at 180°, dB</b>	31	30	33	33	33	34
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	22	22	27	25	26	26
<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

	<b>698–728</b>	<b>758–798</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2180</b>	<b>2300–2360</b>
<b>Frequency Band, MHz</b>	<b>698–728</b>	<b>758–798</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2180</b>	<b>2300–2360</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.3	13.8	16.2	16.9	17.4	17.8
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.3	±0.3	±0.8	±0.5	±0.7	±0.5
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±5	±5	±7	±9	±5	±5
<b>Beamwidth, Vertical</b>	±0.6	±0.6	±0.4	±0.3	±0.4	±0.2

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## Tolerance, degrees

<b>USLS, beampeak to 20° above beampeak, dB</b>	16	16	12	13	13	11
<b>CPR at Boresight, dB</b>	20	21	23	23	24	20
<b>CPR at Sector, dB</b>	10	10	7	6	4	5

## 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>	241.4 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>	58.3 kg   128.529 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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