

# JAHH-65C-R3B-V2



8-port sector antenna, 2x 698–803, 2x 824–894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers. Internal SBT's on first LB(Port 1) and first HB(Port 5)

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<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>	4
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	8

## 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

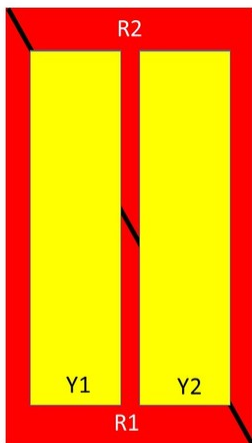
# JAHH-65C-R3B-V2

<b>Internal Bias Tee</b>	Port 1   Port 5
<b>Internal RET</b>	High band (1)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

<b>Width</b>	350 mm   13.78 in
<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2438 mm   95.984 in
<b>Net Weight, without mounting kit</b>	36.1 kg   79.587 lb

## Array Layout



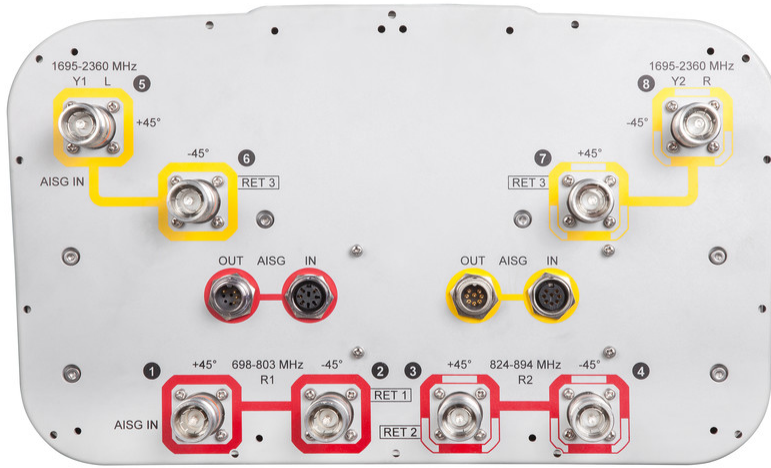
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-803	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	824-894	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2360	7-8		

Left      Right  
Bottom

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

## Port Configuration

# JAHH-65C-R3B-V2



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2360 MHz   698 – 803 MHz   824 – 894 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	800 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	698–803	824–894	1695–1880	1850–1990	1920–2200	2300–2360
<b>Gain, dBi</b>	15.6	16.1	18.2	18.6	18.8	18.9
<b>Beamwidth, Horizontal, degrees</b>	67	64	62	60	61	63
<b>Beamwidth, Vertical, degrees</b>	9.9	8.4	5.6	5.2	4.9	4.5
<b>Beam Tilt, degrees</b>	0–11	0–11	0–10	0–10	0–10	0–10
<b>USLS (First Lobe), dB</b>	22	23	18	18	18	18
<b>Front-to-Back Ratio at 180°, dB</b>	33	31	30	34	37	35
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30
<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

# JAHH-65C-R3B-V2

<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	200	200	250	250	250	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–803</b>	<b>824–894</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2360</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.2	15.9	17.6	18.4	18.5	18.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.4	±0.7	±0.4	±0.5	±0.6
<b>Gain by Beam Tilt, average, dBi</b>	0°   15.1 5°   15.3 11°   15.2	0°   15.6 5°   16.0 11°   15.9	0°   17.4 5°   17.7 10°   17.5	0°   18.1 5°   18.5 10°   18.4	0°   18.1 5°   18.6 10°   18.4	0°   18.1 5°   18.7 10°   18.3
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±0.9	±1.6	±3.5	±2.5	±2.7	±4.1
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.4	±0.3	±0.2	±0.3	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	16	14	15	16	16	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	26	23	25	30	28	29
<b>CPR at Boresight, dB</b>	22	22	21	24	22	22
<b>CPR at Sector, dB</b>	12	11	10	13	12	7

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.4 m <sup>2</sup>   4.306 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.34 m <sup>2</sup>   3.66 ft <sup>2</sup>
<b>Mechanical Tilt Range</b>	0°–12°
<b>Wind Loading @ Velocity, frontal</b>	425.0 N @ 150 km/h (95.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	361.0 N @ 150 km/h (81.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	900.0 N @ 150 km/h (202.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	451.0 N @ 150 km/h (101.4 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	456 mm   17.953 in
<b>Depth, packed</b>	357 mm   14.055 in
<b>Length, packed</b>	2585 mm   101.772 in

# JAHH-65C-R3B-V2

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**Weight, gross**

51.1 kg | 112.656 lb

## Regulatory Compliance/Certifications

**Agency**

**Classification**

CHINA-ROHS

Above maximum concentration value

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

ROHS

Compliant/Exempted

UK-ROHS

Compliant/Exempted



## 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.

## \* Footnotes

**Performance Note**

Severe environmental conditions may degrade optimum performance