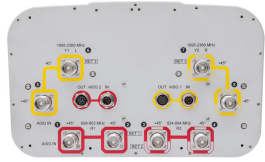


# JAHH-65B-R3B-V3



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
<b>Effective Projective Area (EPA), frontal</b>	0.28 m <sup>2</sup>   3.014 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.24 m <sup>2</sup>   2.583 ft <sup>2</sup>
<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, General

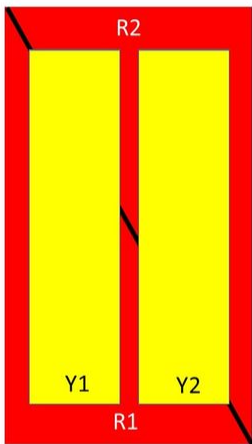
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male

# JAHH-65B-R3B-V3

## Dimensions

<b>Width</b>	350 mm   13.78 in
<b>Length</b>	1828 mm   71.969 in
<b>Depth</b>	208 mm   8.189 in

## Array Layout



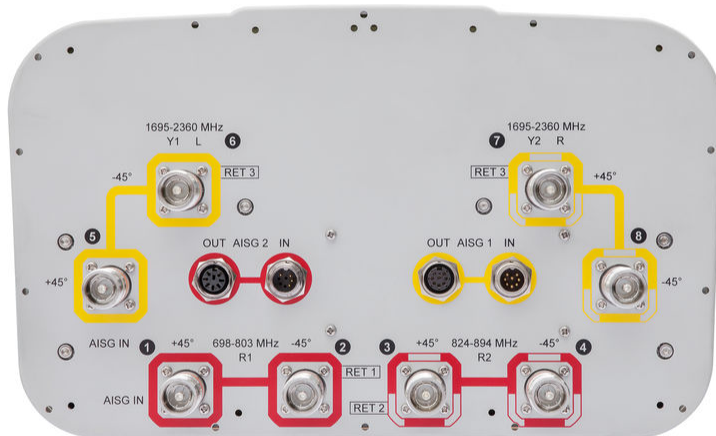
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-803	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	824-894	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2360	7-8		

Left  
Bottom  
Right

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

## Port Configuration

# JAHH-65B-R3B-V3



## 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>	900 W @ 50 °C

## Remote Electrical Tilt (RET) Information, Electrical

<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1   Port 5

# JAHH-65B-R3B-V3

Internal RET

High band (1) | Low band (2)

## Electrical Specifications

Frequency Band, MHz	698–803	824–894	1695–1880	1850–1990	1920–2200	2300–2360
Gain, dBi	14.9	15.3	17.9	18.5	18.8	19.3
Beamwidth, Horizontal, degrees	67	65	62	60	61	64
Beamwidth, Vertical, degrees	11.8	10.4	5.6	5.2	4.9	4.5
Beam Tilt, degrees	2–14	2–14	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	20	20	17	17	18	20
Front-to-Back Ratio at 180°, dB	32	32	34	39	36	40
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
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	300	300	250	250	250	200

## Electrical Specifications, BASTA

Frequency Band, MHz	698–803	824–894	1695–1880	1850–1990	1920–2200	2300–2360
Gain by all Beam Tilts, average, dBi	14.7	15.2	17.6	18.2	18.5	18.8
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.3	±0.6	±0.5	±0.5	±0.7
Gain by Beam Tilt, average, dBi	2°   14.6 8°   14.8 14°   14.5	2°   15.2 8°   15.3 14°   15.1	0°   17.3 5°   17.7 10°   17.7	0°   17.8 5°   18.3 10°   18.3	0°   17.9 5°   18.5 10°   18.5	0°   18.1 5°   18.9 10°   19.0
Beamwidth, Horizontal Tolerance, degrees	±1.6	±1.2	±4	±2	±1.9	±3.3
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.5	±0.3	±0.2	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB	19	20	15	16	17	17
Front-to-Back Total Power at 180° ± 30°, dB	24	23	27	30	25	28
CPR at Boresight, dB	18	17	19	21	21	21
CPR at Sector, dB	9	11	12	12	12	8

## Mechanical Specifications

# JAHH-65B-R3B-V3

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<b>Wind Loading at Velocity, frontal</b>	301.0 N @ 150 km/h   67.7 lbf @ 150 km/h
<b>Wind Loading at Velocity, lateral</b>	254.0 N @ 150 km/h   57.1 lbf @ 150 km/h
<b>Wind Loading at Velocity, maximum</b>	143.4 lbf @ 150 km/h   638.0 N @ 150 km/h
<b>Wind Speed, maximum</b>	241 km/h   149.75 mph

## Packaging and Weights

<b>Width, packed</b>	450 mm   17.717 in
<b>Depth, packed</b>	355 mm   13.976 in
<b>Length, packed</b>	1975 mm   77.756 in
<b>Net Weight, without mounting kit</b>	31.1 kg   68.564 lb
<b>Weight, gross</b>	42.2 kg   93.035 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-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