

# JAHH-65B-R3B



8-port sector antenna, 2x 698–787, 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

## General Specifications

|                                  |                                                                                                                      |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Antenna Type                     | Sector                                                                                                               |
| Band                             | Multiband                                                                                                            |
| Color                            | Light Gray (RAL 7035)                                                                                                |
| Grounding Type                   | RF connector body grounded to reflector and mounting bracket                                                         |
| Performance Note                 | Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| Radome Material                  | Fiberglass, UV resistant                                                                                             |
| Radiator Material                | Aluminum   Low loss circuit board                                                                                    |
| Reflector Material               | Aluminum                                                                                                             |
| RF Connector Interface           | 4.3-10 Female                                                                                                        |
| RF Connector Location            | Bottom                                                                                                               |
| RF Connector Quantity, high band | 4                                                                                                                    |
| RF Connector Quantity, mid band  | 0                                                                                                                    |
| RF Connector Quantity, low band  | 4                                                                                                                    |
| RF Connector Quantity, total     | 8                                                                                                                    |

## Remote Electrical Tilt (RET) Information

|                         |                                   |
|-------------------------|-----------------------------------|
| RET Interface           | 8-pin DIN Female   8-pin DIN Male |
| RET Interface, quantity | 2 female   2 male                 |
| Input Voltage           | 10–30 Vdc                         |
| Internal Bias Tee       | Port 1   Port 5                   |

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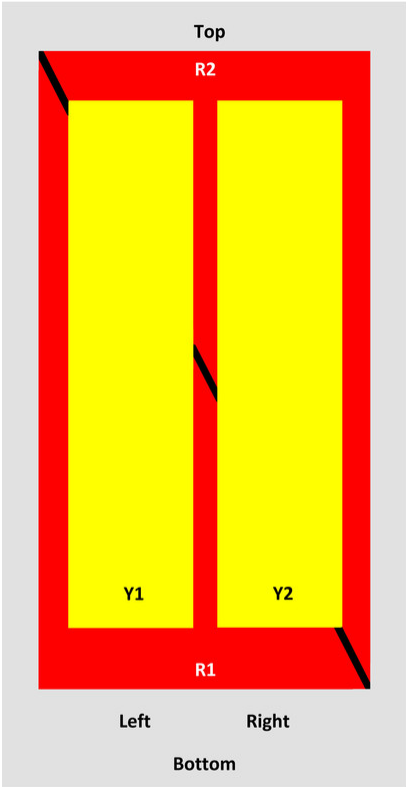
|                                               |                              |
|-----------------------------------------------|------------------------------|
| Internal RET                                  | High band (1)   Low band (2) |
| Power Consumption, idle state, maximum        | 2 W                          |
| Power Consumption, normal conditions, maximum | 13 W                         |
| Protocol                                      | 3GPP/AISG 2.0 (Single RET)   |

## Dimensions

|                                  |                     |
|----------------------------------|---------------------|
| Width                            | 350 mm   13.78 in   |
| Depth                            | 208 mm   8.189 in   |
| Length                           | 1828 mm   71.969 in |
| Net Weight, without mounting kit | 29.2 kg   64.375 lb |

## Array Layout

JAHH-65A-R3B JAHH-65B-R3B JAHH-65C-R3B



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID     |
|-------|------------|-------|------------|------------------|
| R1    | 698-798    | 1-2   | 1          | ANXXXXXXXXXXXXX1 |
| R2    | 824-894    | 3-4   | 2          | ANXXXXXXXXXXXXX2 |
| Y1    | 1695-2360  | 5-6   | 3          | ANXXXXXXXXXXXXX3 |
| Y2    | 1695-2360  | 7-8   |            |                  |

View from the front of the antenna  
(Sizes of colored boxes are not true depictions of array sizes)

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## Electrical Specifications

|                          |                                                 |
|--------------------------|-------------------------------------------------|
| Impedance                | 50 ohm                                          |
| Operating Frequency Band | 1695 – 2360 MHz   698 – 787 MHz   824 – 894 MHz |
| Polarization             | ±45°                                            |

## Electrical Specifications

| Frequency Band, MHz                          | 698–787    | 824–894    | 1695–1880  | 1850–1990  | 1920–2200  | 2300–2360  |
|----------------------------------------------|------------|------------|------------|------------|------------|------------|
| Gain, dBi                                    | 14.5       | 15.8       | 18         | 18.4       | 18.5       | 18.8       |
| Beamwidth, Horizontal, degrees               | 67         | 65         | 63         | 63         | 65         | 68         |
| Beamwidth, Vertical, degrees                 | 12.4       | 10.5       | 5.7        | 5.2        | 4.9        | 4.4        |
| Beam Tilt, degrees                           | 2–14       | 2–14       | 0–10       | 0–10       | 0–10       | 0–10       |
| USLS (First Lobe), dB                        | 18         | 18         | 20         | 20         | 21         | 23         |
| Front-to-Back Ratio at 180°, dB              | 32         | 34         | 31         | 35         | 36         | 38         |
| 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                | -153       | -153       | -153       | -153       | -153       | -153       |
| Input Power per Port at 50°C, maximum, watts | 200        | 200        | 300        | 300        | 300        | 250        |

## Mechanical Specifications

|                                          |                                           |
|------------------------------------------|-------------------------------------------|
| Effective Projective Area (EPA), frontal | 0.28 m²   3.014 ft²                       |
| Effective Projective Area (EPA), lateral | 0.24 m²   2.583 ft²                       |
| Mechanical Tilt Range                    | 0°–16°                                    |
| Wind Loading @ Velocity, frontal         | 301.0 N @ 150 km/h (67.7 lbf @ 150 km/h)  |
| Wind Loading @ Velocity, lateral         | 254.0 N @ 150 km/h (57.1 lbf @ 150 km/h)  |
| Wind Loading @ Velocity, maximum         | 638.0 N @ 150 km/h (143.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear            | 319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)  |
| Wind Speed, maximum                      | 241 km/h (150 mph)                        |

## Packaging and Weights

|               |                    |
|---------------|--------------------|
| Width, packed | 456 mm   17.953 in |
|---------------|--------------------|

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|                |                     |
|----------------|---------------------|
| Depth, packed  | 357 mm   14.055 in  |
| Length, packed | 1975 mm   77.756 in |
| Weight, gross  | 42.5 kg   93.696 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 |
|------------------|-----------------------------------------------------------------|