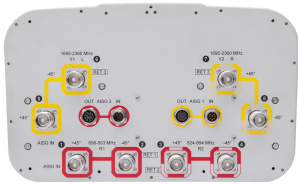


JAHH-65B-R3B-V3



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
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

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 | 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, low band | 4 |
| RF Connector Quantity, total | 8 |

Remote Electrical Tilt (RET) Information

| | |
|--------------------------------|-----------------------------------|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 2 female 2 male |

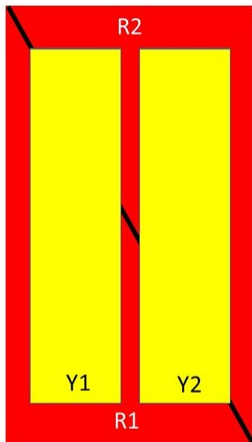
JAHH-65B-R3B-V3

| | |
|--|------------------------------|
| Input Voltage | 10–30 Vdc |
| Internal Bias Tee | Port 1 Port 5 |
| Internal RET | High band (1) Low band (2) |
| Power Consumption, idle state, maximum | 1 W |
| Power Consumption, normal conditions, maximum | 8 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 | 31.1 kg 68.564 lb |

Array Layout



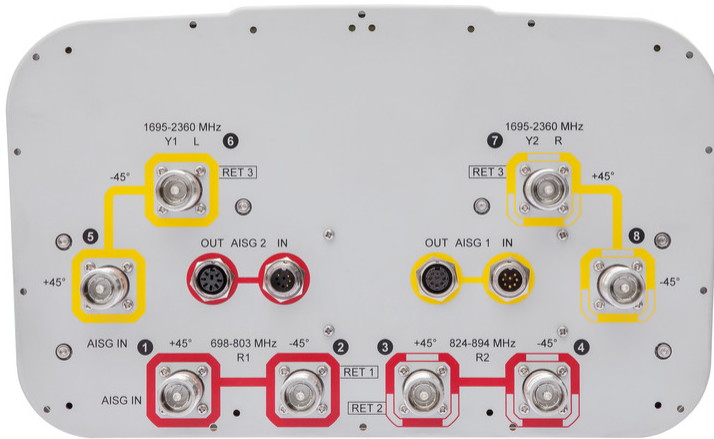
| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|----------------------|
| R1 | 698-803 | 1-2 | 1 | CPxxxxxxxxxxxxxxxxR1 |
| R2 | 824-894 | 3-4 | 2 | CPxxxxxxxxxxxxxxxxR2 |
| Y1 | 1695-2360 | 5-6 | 3 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2360 | 7-8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

Left Right
Bottom

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

Port Configuration

JAHH-65B-R3B-V3



Electrical Specifications

| | |
|-----------------------------------|---|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2360 MHz 698 – 803 MHz 824 – 894 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 900 W @ 50 °C |

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 |

JAHH-65B-R3B-V3

| | | | | | | |
|---|------|------|------|------|------|------|
| 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 | ±4.0 | ±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

| | |
|---|---|
| Effective Projective Area (EPA), frontal | 0.28 m ² 3.014 ft ² |
| Effective Projective Area (EPA), lateral | 0.24 m ² 2.583 ft ² |
| 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 | 450 mm 17.717 in |
| Depth, packed | 355 mm 13.976 in |
| Length, packed | 1975 mm 77.756 in |

JAHH-65B-R3B-V3

Weight, gross

39.8 kg | 87.744 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-2F

- Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance