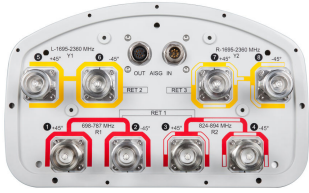


SBJAHH-1D65B-DL



8-port sector antenna, 2x 698–787, 2x 824–894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Independent tilt for high bands and single tilt for low bands
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

OBSOLETE

This product was discontinued on: **March 31, 2021**

Replaced By:

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).

General Specifications

| | |
|---|--|
| Antenna Type | Sector |
| Band | Multiband |
| Color | Light Gray (RAL 7035) |
| Grounding Type | RF connector inner conductor and 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 | Copper Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 7-16 DIN 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 Interface 8-pin DIN Female | 8-pin DIN Male

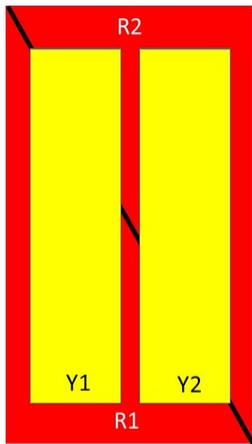
SBJAHH-1D65B-DL

| | |
|--|------------------------------|
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (2) Low band (1) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |
| Protocol | 3GPP/AISG 2.0 (Multi-RET) |

Dimensions

| | |
|---|------------------------|
| Width | 301 mm 11.85 in |
| Depth | 180.5 mm 7.106 in |
| Length | 1,850.7 mm 72.862 in |
| Net Weight, without mounting kit | 21.4 kg 47.179 lb |

Array Layout



| Array | Freq (MHz) | Conns | RET (MRET) | AISG RET UID |
|-------|------------|-------|------------|-------------------------|
| R1 | 698-787 | 1-2 | 1 | Arxxxxxxxxxxxxxxxxxxx.1 |
| R2 | 824-894 | 3-4 | | |
| Y1 | 1695-2360 | 5-6 | 2 | Arxxxxxxxxxxxxxxxxxxx.2 |
| Y2 | 1695-2360 | 7-8 | 3 | Arxxxxxxxxxxxxxxxxxxx.3 |

Left Bottom Right

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

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 |
|----------------------------|----------------|----------------|------------------|------------------|------------------|------------------|

SBJAHH-1D65B-DL

| | | | | | | |
|--|----------|----------|----------|----------|----------|----------|
| Gain, dBi | 14.5 | 14.3 | 17.7 | 18.1 | 18.7 | 18.6 |
| Beamwidth, Horizontal, degrees | 68 | 65 | 70 | 65.8 | 62 | 57 |
| Beamwidth, Vertical, degrees | 12.1 | 10.6 | 5.6 | 5.2 | 4.9 | 4.5 |
| Beam Tilt, degrees | 0–14 | 0–14 | 0–7 | 0–7 | 0–7 | 0–7 |
| USLS (First Lobe), dB | 13 | 13 | 17 | 16 | 17 | 15 |
| Front-to-Back Ratio at 180°, dB | 27 | 28 | 30 | 28 | 30 | 31 |
| CPR at Boresight, dB | 23 | 21 | 20 | 19 | 19 | 21 |
| CPR at Sector, dB | 14 | 10 | 14 | 11 | 10 | 2 |
| 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 | 250 | 250 | 300 | 300 | 300 | 300 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698–787 | 824–894 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|---|--------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Gain by all Beam Tilts, average, dBi | 14.2 | 13.7 | 17.3 | 17.9 | 18.2 | 18.4 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.8 | ±0.4 | ±0.3 | ±0.5 | ±0.3 |
| Gain by Beam Tilt, average, dBi | 0° 14.2 7° 14.3 14° 13.8 | 0° 13.9 7° 13.9 14° 13.2 | 0° 17.3 3° 17.4 7° 17.2 | 0° 17.8 3° 17.9 7° 17.9 | 0° 18.1 3° 18.3 7° 18.2 | 0° 18.2 3° 18.6 7° 18.5 |
| Beamwidth, Horizontal Tolerance, degrees | ±2.1 | ±2.4 | ±2.5 | ±4.4 | ±4.6 | ±3.4 |
| Beamwidth, Vertical Tolerance, degrees | ±1.7 | ±0.7 | ±0.3 | ±0.2 | ±0.3 | ±0.2 |
| USLS, beampeak to 20° above beampeak, dB | 21 | 20 | 15 | 15 | 16 | 14 |
| Front-to-Back Total Power at 180° ± 30°, dB | 24 | 24 | 28 | 27 | 27 | 25.6 |
| CPR at Boresight, dB | 23 | 21 | 20 | 19 | 19 | 21 |
| CPR at Sector, dB | 14 | 10 | 14 | 11 | 10 | 2 |

Mechanical Specifications

Effective Projective Area (EPA), frontal

0.27 m² | 2.906 ft²

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| | |
|---|---|
| Effective Projective Area (EPA), lateral | 0.22 m ² 2.368 ft ² |
| Wind Loading @ Velocity, frontal | 283.0 N @ 150 km/h (63.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 234.0 N @ 150 km/h (52.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 545.0 N @ 150 km/h (122.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 287.0 N @ 150 km/h (64.5 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 409 mm 16.102 in |
| Depth, packed | 299 mm 11.772 in |
| Length, packed | 1970 mm 77.559 in |
| Weight, gross | 31.6 kg 69.666 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |



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 |
|-------------------------|---|