

SBJAH4-1D65C-DL



12-port sector antenna, 2x 698–798, 2x 824–896 and 8x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have duplexers

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Provides support for future Band 14 operations
- 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 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 | Aluminum Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 4.3-10 Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 8 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 12 |

Remote Electrical Tilt (RET) Information

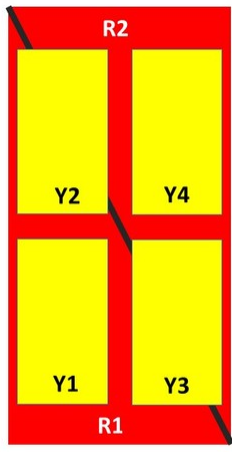
| | |
|--|-----------------------------------|
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (2) Low band (1) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |
| Protocol | 3GPP/AISG 2.0 (Multi-RET) |

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Dimensions

| | |
|---|---------------------|
| Width | 350 mm 13.78 in |
| Depth | 208 mm 8.189 in |
| Length | 2438 mm 95.984 in |
| Net Weight, without mounting kit | 31.4 kg 69.225 lb |

Array Layout



| Array | Freq (MHz) | Conns | RET (MRET) | AISG RET UID |
|-------|------------|-------|------------|-------------------------|
| R1 | 698-798 | 1-2 | 1 | ANxxxxxxxxxxxxxxxxxxx.1 |
| R2 | 824-896 | 3-4 | | |
| Y1 | 1695-2360 | 5-6 | 2 | ANxxxxxxxxxxxxxxxxxxx.2 |
| Y3 | 1695-2360 | 9-10 | | |
| Y2 | 1695-2360 | 7-8 | 3 | ANxxxxxxxxxxxxxxxxxxx.3 |
| Y4 | 1695-2360 | 11-12 | | |

Left Right
Bottom

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

Electrical Specifications

| | |
|---------------------------------|---|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2360 MHz 698 – 798 MHz 824 – 896 MHz |
| Polarization | ±45° |

Electrical Specifications

| Frequency Band, MHz | 698–798 | 824–896 | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2360 |
|---------------------------------------|---------|---------|-----------|-----------|-----------|-----------|
| Gain, dBi | 15.9 | 16.4 | 16.9 | 17.2 | 17.6 | 17.6 |
| Beamwidth, Horizontal, degrees | 67 | 64 | 63 | 63 | 64 | 65 |
| Beamwidth, Vertical, degrees | 9.7 | 8.6 | 8.2 | 7.5 | 7 | 6.2 |
| Beam Tilt, degrees | 2–11 | 2–11 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 16 | 18 | 17 | 18 | 17 | 14 |
| Front-to-Back Ratio at 180°, | 32 | 34 | 31 | 36 | 36 | 36 |

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| dB | | | | | | |
|--------------------------------------|----------|----------|----------|----------|----------|----------|
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 28 | 28 | 28 |
| 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, maximum, watts | 350 | 350 | 350 | 350 | 350 | 300 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698–798 | 824–896 | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2360 |
|---|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Gain by all Beam Tilts, average, dBi | 15.7 | 16.2 | 16.4 | 16.8 | 17 | 17.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.4 | ±0.6 | ±0.4 | ±0.6 | ±0.5 |
| Gain by Beam Tilt, average, dBi | 2° 15.6 6° 15.8 11° 15.7 | 2° 15.9 6° 16.2 11° 16.2 | 2° 16.3 6° 16.4 12° 16.3 | 2° 16.7 6° 16.9 12° 16.7 | 2° 16.7 6° 17.2 12° 17.0 | 2° 17.1 6° 17.6 12° 17.4 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.1 | ±1.5 | ±3.5 | ±3 | ±4.5 | ±3.7 |
| Beamwidth, Vertical Tolerance, degrees | ±0.7 | ±0.6 | ±0.5 | ±0.4 | ±0.6 | ±0.2 |
| USLS, beampeak to 20° above beampeak, dB | 16 | 17 | 14 | 16 | 16 | 14 |
| Front-to-Back Total Power at 180° ± 30°, dB | 26 | 24 | 27 | 30 | 27 | 28 |
| CPR at Boresight, dB | 21 | 21 | 19 | 21 | 23 | 24 |
| CPR at Sector, dB | 10 | 12 | 10 | 14 | 13 | 8 |

Mechanical Specifications

| | |
|--|--|
| Effective Projective Area (EPA), frontal | 0.4 m ² 4.306 ft ² |
| Effective Projective Area (EPA), lateral | 0.34 m ² 3.66 ft ² |
| Wind Loading @ Velocity, frontal | 425.0 N @ 150 km/h (95.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 361.0 N @ 150 km/h (81.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 900.0 N @ 150 km/h (202.3 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 451.0 N @ 150 km/h (101.4 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

SBJAH4-1D65C-DL

| | |
|-----------------------|----------------------|
| Width, packed | 450 mm 17.717 in |
| Depth, packed | 355 mm 13.976 in |
| Length, packed | 2585 mm 101.772 in |
| Weight, gross | 43.8 kg 96.562 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Below maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| ROHS | Compliant |
| UK-ROHS | Compliant |



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