

SBNHH-1D45B-SR



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 3x RET

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Three internal RETs for independent tilt on all three bands

OBSOLETE

This product was discontinued on: **March 31, 2022**

Replaced By:

NHH-45B-R2B

6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

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 | 7-16 DIN Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 4 |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 6 |

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 |

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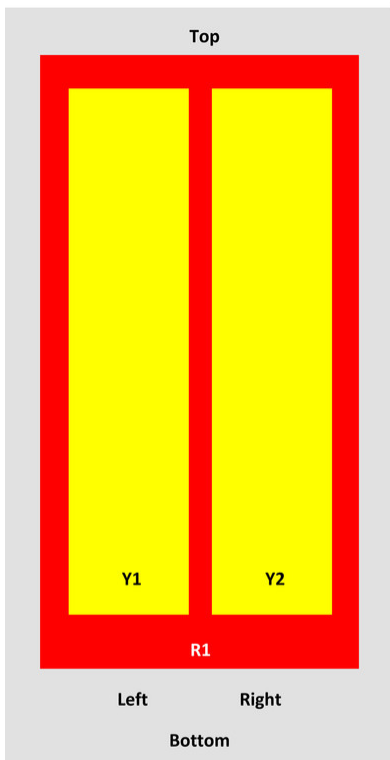
| | |
|--|------------------------------|
| Internal RET | High band (2) Low band (1) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|---|---------------------|
| Width | 457 mm 17.992 in |
| Depth | 178 mm 7.008 in |
| Length | 1829 mm 72.008 in |
| Net Weight, without mounting kit | 29.2 kg 64.375 lb |

Array Layout

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| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|------------------|
| R1 | 698-896 | 1-2 | 1 | ANXXXXXXXXXXXXX1 |
| Y1 | 1695-2360 | 3-4 | 2 | ANXXXXXXXXXXXXX2 |
| Y2 | 1695-2360 | 5-6 | 3 | ANXXXXXXXXXXXXX3 |

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 – 896 MHz |
| Polarization | ±45° |

Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|---|----------|----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 16.9 | 17.6 | 19.6 | 20.1 | 20.5 | 21 |
| Beamwidth, Horizontal, degrees | 47 | 43 | 45 | 42 | 42 | 39 |
| Beamwidth, Vertical, degrees | 12.4 | 11.4 | 5.8 | 5.3 | 5.1 | 4.5 |
| Beam Tilt, degrees | 0–14 | 0–14 | 0–8 | 0–8 | 0–8 | 0–8 |
| USLS (First Lobe), dB | 16 | 16 | 18 | 17 | 17 | 16 |
| Front-to-Back Ratio at 180°, dB | 34 | 33 | 35 | 37 | 37 | 39 |
| 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, maximum, watts | 350 | 350 | 350 | 350 | 350 | 300 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|---|--------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Gain by all Beam Tilts, average, dBi | 16.6 | 17.3 | 19.2 | 19.8 | 20.1 | 20.8 |
| Gain by all Beam Tilts Tolerance, dB | ±0.4 | ±0.3 | ±0.5 | ±0.4 | ±0.5 | ±0.4 |
| Gain by Beam Tilt, average, dBi | 0° 16.6 7° 16.7 14° 16.4 | 0° 17.3 7° 17.4 14° 17.1 | 0° 19.3 4° 19.3 8° 19.0 | 0° 19.9 4° 19.9 8° 19.6 | 0° 20.1 4° 20.2 8° 20.0 | 0° 20.7 4° 20.9 8° 20.4 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.5 | ±2.8 | ±2.1 | ±1.7 | ±1 | ±1.7 |
| Beamwidth, Vertical Tolerance, degrees | ±0.8 | ±0.6 | ±0.3 | ±0.2 | ±0.4 | ±0.1 |
| USLS, beampeak to 20° above beampeak, dB | 19 | 23 | 16 | 15 | 16 | 16 |
| Front-to-Back Total Power at | 24 | 24 | 28 | 30 | 31 | 30 |

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180° ± 30°, dB

| | | | | | | |
|--|----|----|----|----|----|----|
| CPR at Boresight, dB | 28 | 29 | 23 | 24 | 20 | 19 |
| CPR at 10 dB Horizontal Beamwidth, dB | 13 | 17 | 13 | 13 | 13 | 13 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 1,038.0 N @ 150 km/h (233.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 234.0 N @ 150 km/h (52.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 1,091.0 N @ 150 km/h (245.3 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 567 mm 22.323 in |
| Depth, packed | 311 mm 12.244 in |
| Length, packed | 1950 mm 76.772 in |
| Weight, gross | 42.5 kg 93.696 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CE | Compliant with the relevant CE product directives |
| CHINA-ROHS | Above maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| 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 |
|-------------------------|---|

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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 115 mm | 4.528 in

Compatible Diameter, minimum 60 mm | 2.362 in

Weight, net 6.2 kg | 13.669 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 6.4 kg | 14.11 lb

Regulatory Compliance/Certifications

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| UK-ROHS | Compliant |

BSAMNT-3

