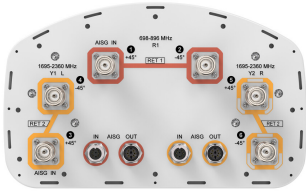


NHH-65B-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One RET for low band and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO

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 | 2 |
| RF Connector Quantity, total | 6 |

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 3 |
| Internal RET | High band (1) Low band (1) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |

NHH-65B-R2B

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

Width 301 mm | 11.85 in

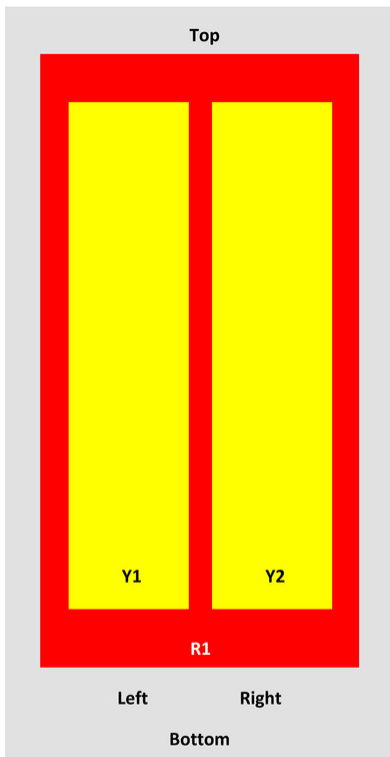
Depth 180 mm | 7.087 in

Length 1828 mm | 71.969 in

Net Weight, without mounting kit 19.8 kg | 43.651 lb

Array Layout

NHH



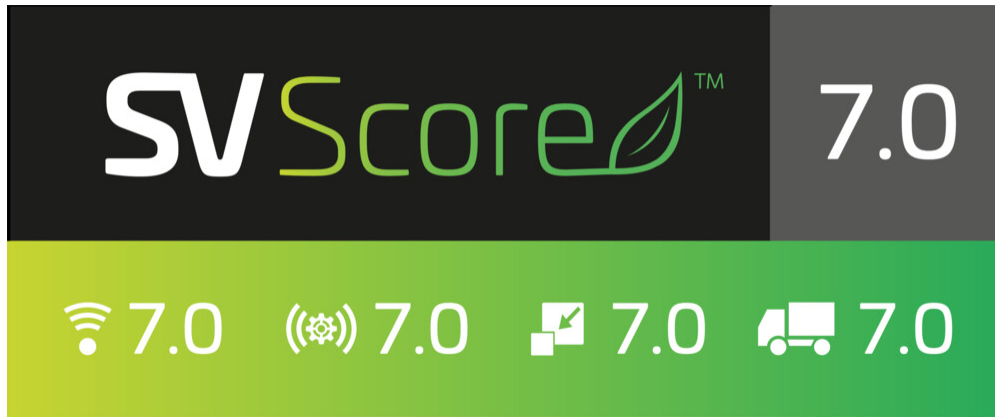
| Array | Freq (MHz) | Coms | RET (SRET) | AISG RET UID |
|-------|------------|------|------------|------------------|
| R1 | 698-896 | 1-2 | 1 | ANXXXXXXXXXXXXX1 |
| Y1 | 1695-2360 | 3-4 | 2 | ANXXXXXXXXXXXXX2 |
| Y2 | 1695-2360 | 5-6 | | |

View from the front of the antenna

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

Logo Image

NHH-65B-R2B



Electrical Specifications

| | |
|-----------------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2360 MHz 698 – 896 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 900 W @ 50 °C |

Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|---|----------|----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 14.9 | 15 | 17.7 | 17.9 | 18.4 | 18.7 |
| Beamwidth, Horizontal, degrees | 65 | 60 | 71 | 69 | 64 | 57 |
| Beamwidth, Vertical, degrees | 12.4 | 11.2 | 5.7 | 5.2 | 4.9 | 4.6 |
| Beam Tilt, degrees | 0–14 | 0–14 | 0–7 | 0–7 | 0–7 | 0–7 |
| USLS (First Lobe), dB | 13 | 14 | 18 | 18 | 19 | 18 |
| Front-to-Back Ratio at 180°, dB | 30 | 29 | 31 | 30 | 29 | 31 |
| 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 | 300 | 300 | 300 | 300 | 300 | 300 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2360 |
|---------------------|---------|---------|-----------|-----------|-----------|-----------|
|---------------------|---------|---------|-----------|-----------|-----------|-----------|

NHH-65B-R2B

| | | | | | | |
|--|--------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Gain by all Beam Tilts, average, dBi | 14.5 | 14.5 | 17.3 | 17.7 | 18.1 | 18.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.6 | ±1.1 | ±0.4 | ±0.4 | ±0.5 | ±0.3 |
| Gain by Beam Tilt, average, dBi | 0° 14.4 7° 14.6 14° 14.3 | 0° 14.7 7° 14.7 14° 14.1 | 0° 17.2 4° 17.3 7° 17.3 | 0° 17.6 4° 17.7 7° 17.7 | 0° 18.0 4° 18.2 7° 18.1 | 0° 18.3 4° 18.5 7° 18.6 |
| Beamwidth, Horizontal Tolerance, degrees | ±2 | ±2.1 | ±3 | ±4.1 | ±6.5 | ±2.9 |
| Beamwidth, Vertical Tolerance, degrees | ±0.7 | ±0.7 | ±0.3 | ±0.2 | ±0.3 | ±0.2 |
| USLS, beampeak to 20° above beampeak, dB | 13 | 14 | 16 | 16 | 17 | 15 |
| Front-to-Back Total Power at 180° ± 30°, dB | 23 | 22 | 27 | 27 | 25 | 25 |
| CPR at Boresight, dB | 22 | 21 | 23 | 23 | 22 | 19 |
| CPR at Sector, dB | 10 | 7 | 16 | 13 | 11 | 4 |

Mechanical Specifications

| | |
|---|---|
| Effective Projective Area (EPA), frontal | 0.26 m ² 2.799 ft ² |
| Effective Projective Area (EPA), lateral | 0.22 m ² 2.368 ft ² |
| Mechanical Tilt Range | 0°–15° |
| Wind Loading @ Velocity, frontal | 278.0 N @ 150 km/h (62.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 230.0 N @ 150 km/h (51.7 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 537.0 N @ 150 km/h (120.7 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 282.0 N @ 150 km/h (63.4 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 380 mm 14.961 in |
| Depth, packed | 295 mm 11.614 in |
| Length, packed | 1956 mm 77.008 in |
| Weight, gross | 30.4 kg 67.02 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 |

NHH-65B-R2B

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant

UK-ROHS Compliant



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