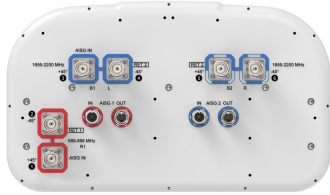


NHH-55A-R2B



6-port sector antenna, 2x 698–896, 4x 1695–2200, 55° HPBW, 2x RETs

- Utilizes Pattern Shaping Technology to reduce cell overlap and maximize SINR (Signal to Interference and Noise Ratio)
- Superior SPR (Sector Power Ratio) for best-in-class data throughput rates
- Excellent pattern overlay across all bands
- Low band and mid band performance mirrors performance of the equivalent ten port antenna
- Internal SBTs on low and mid band allow remote RET control from the radio over the RF jumper cable
- One LB RET and one MB RET. Both mid band arrays are controlled by one RET to ensure same tilt level for best 4x4 MIMO performance
- Use optional BSAMNT-SBS-2-2 for side-by-side mounting of two hex and/or ten port 55° antennas

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 |
| Radome Material | Fiberglass, UV resistant |
| Radiator Material | Aluminum Low loss circuit board |
| RF Connector Interface | 4.3-10 Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, mid band | 4 |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 6 |

Remote Electrical Tilt (RET) Information

| | |
|---|-----------------------------|
| RET Hardware | CommRET v2 |
| RET Interface, quantity | 2 female 2 male |
| Input Voltage | 10–30 Vdc |
| Internal Bias Tee | Port 1 Port 3 |
| Internal RET | Low band (1) Mid band (1) |
| Power Consumption, active state, maximum | 10 W |

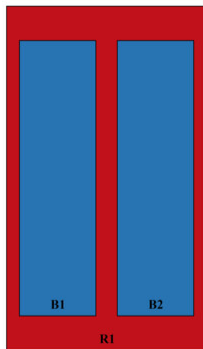
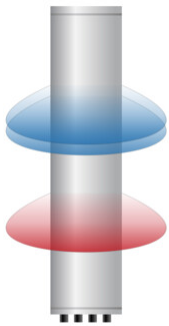
NHH-55A-R2B

Power Consumption, idle state, maximum 2 W
Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

Width 395 mm | 15.551 in
Depth 228 mm | 8.976 in
Length 1413 mm | 55.63 in
Net Weight, antenna only 20 kg | 44.092 lb

Array Layout

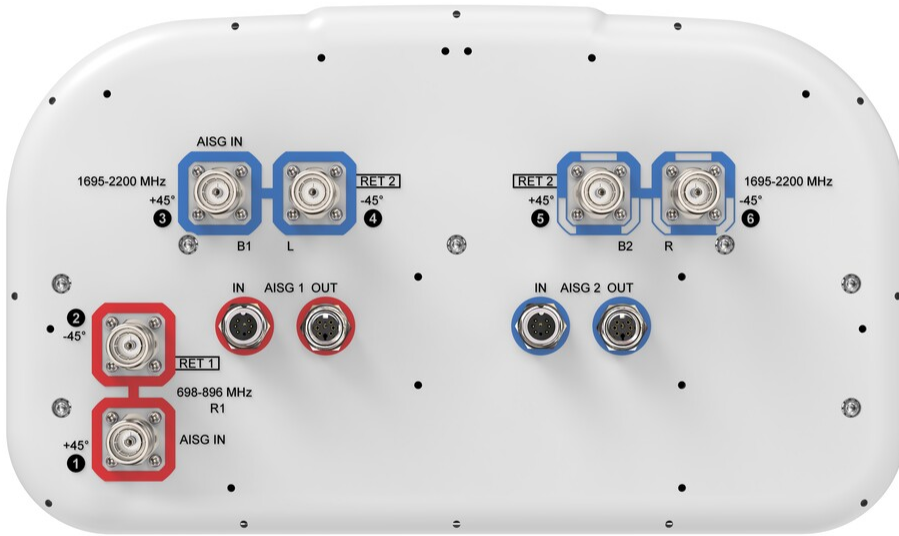


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|---------------|----------|----------------------|
| R1 | 698-896 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxxxxxR1 |
| B1 | 1695-2200 | 3 - 4 | 2 | AISG2 | CPxxxxxxxxxxxxxxxxB1 |
| B2 | 1695-2200 | 5 - 6 | | | |

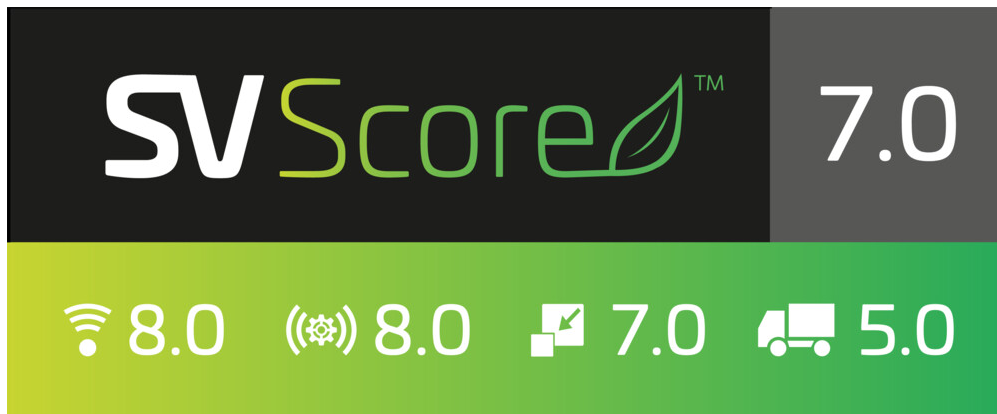
(Sizes of colored boxes are not true depictions of array sizes)

Port Configuration

NHH-55A-R2B



Logo Image



Electrical Specifications

NHH-55A-R2B

| | |
|-----------------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2200 MHz 698 – 896 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 1,000 W @ 50 °C |

Electrical Specifications

| | R1 | R1 | B1,B2 | B1,B2 | B1,B2 |
|---|----------------|----------------|------------------|------------------|------------------|
| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 |
| RF Port | 1,2 | 1,2 | 3,4,5,6 | 3,4,5,6 | 3,4,5,6 |
| Gain, dBi | 14.5 | 14.7 | 17.1 | 17.6 | 18.1 |
| Beamwidth, Horizontal, degrees | 59 | 54 | 58 | 58 | 55 |
| Beamwidth, Vertical, degrees | 16 | 14.6 | 7.1 | 6.8 | 6.4 |
| Beam Tilt, degrees | 0–18 | 0–18 | 0–10 | 0–10 | 0–10 |
| USLS (First Lobe), dB | 18 | 16 | 17 | 16 | 16 |
| Front-to-Back Ratio at 180°, dB | 31 | 31 | 32 | 32 | 32 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 25 | 25 | 25 | 25 | 25 |
| VSWR Return loss, dB | 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 |
| Input Power per Port at 50°C, maximum, watts | 250 | 250 | 200 | 200 | 200 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 |
|--|----------------|----------------|------------------|------------------|------------------|
| Gain by all Beam Tilts, average, dBi | 14.1 | 14.4 | 16.8 | 17.2 | 17.6 |
| Gain by all Beam Tilts Tolerance, dB | ±0.5 | ±0.5 | ±0.6 | ±0.4 | ±0.6 |
| Beamwidth, Horizontal Tolerance, degrees | ±3 | ±2 | ±3 | ±2 | ±6 |
| Beamwidth, Vertical Tolerance, degrees | ±1 | ±0.9 | ±0.3 | ±0.3 | ±0.4 |
| Front-to-Back Total Power at 180° ± 30°, dB | 25 | 27 | 23 | 25 | 25 |
| CPR at Boresight, dB | 21 | 21 | 17 | 19 | 22 |

NHH-55A-R2B

Mechanical Specifications

| | |
|---|--|
| Wind Loading @ Velocity, frontal | 203.0 N @ 150 km/h (45.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 180.0 N @ 150 km/h (40.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 407.0 N @ 150 km/h (91.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 232.0 N @ 150 km/h (52.2 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 505 mm 19.882 in |
| Depth, packed | 386 mm 15.197 in |
| Length, packed | 1545 mm 60.827 in |
| Weight, gross | 32.9 kg 72.532 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-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 |
|-------------------------|---|