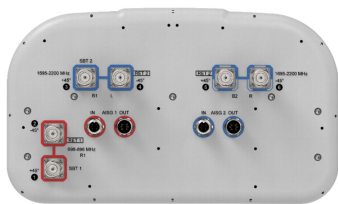


# NHH-55C-HG-R2B



## 6-port Next Generation PerforMax™ Sector Antenna, 2x 698–896 and 4x 1695–2200 MHz, 55° HPBW, 2x RETs and 2x SBTs

- Antenna optimized for higher gain with superior radiation efficiency
- Designed to reduce SUB 1 alarm triggers with pattern consistency between low band and mid band
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Interleaved dipole technology results into an attractive, low wind load mechanical package
- Internal SBTs allow remote RET control from the radio over the RF jumper cable
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Best in class PIM immunity

### 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                                                |
| Reflector Material              | Aluminum                                                                         |
| 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           | 4x 8 pin connector as per IEC 60130-9 Daisy chain in: Male / Daisy chain out: Female Pin3: RS485A(AISG_B), Pin5: RS485B(AISG_A), Pin6: DC 10~30V, Pin7: DC_ Return |
| RET Interface, quantity | 2 female   2 male                                                                                                                                                  |
| Input Voltage           | 10–30 Vdc                                                                                                                                                          |

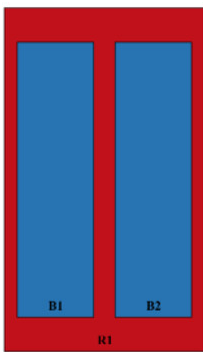
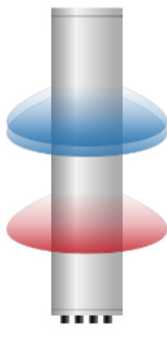
# NHH-55C-HG-R2B

|                                          |                             |
|------------------------------------------|-----------------------------|
| Internal Bias Tee                        | Port 1   Port 3             |
| Internal RET                             | Low band (1)   Mid band (1) |
| Power Consumption, active state, maximum | 10 W                        |
| 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                           | 2438 mm   95.984 in |
| Net Weight, without mounting kit | 32.6 kg   71.871 lb |

## Array Layout

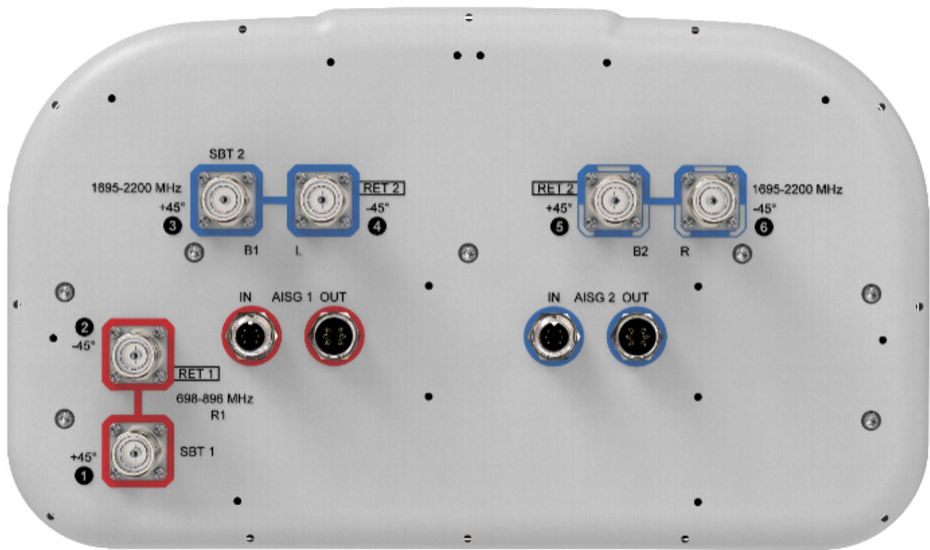


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | SBT RF PORT | SBT No. | RET UID            |
|----------|-----------------|--------------|------------|----------|-------------|---------|--------------------|
| R1       | 698-896         | 1 - 2        | 1          | AISG1    | 1           | 1       | CPxxxxxxxxxxxxxxR1 |
| B1       | 1695-2200       | 3 - 4        | 2          | AISG2    | 3           | 2       | CPxxxxxxxxxxxxxxB1 |
| B2       | 1695-2200       | 5 - 6        |            |          |             |         |                    |

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

## Port Configuration

# NHH-55C-HG-R2B



## Electrical Specifications

|                          |                                 |
|--------------------------|---------------------------------|
| Impedance                | 50 ohm                          |
| Operating Frequency Band | 1695 – 2200 MHz   698 – 896 MHz |
| Polarization             | ±45°                            |

## 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, Maximum, dBi                | 17.8       | 17.3       | 19.6       | 19.6       | 19.9       |
| Gain, dBi                         | 17.4       | 17.1       | 19.1       | 19.3       | 19.6       |
| Beamwidth, Horizontal, degrees    | 58         | 55         | 56         | 57         | 55         |
| Beamwidth, Vertical, degrees      | 8.8        | 7.9        | 5.2        | 4.8        | 4.7        |
| Beam Tilt, degrees                | 0–11       | 0–11       | 0–7        | 0–7        | 0–7        |
| USLS (First Lobe), dB             | 17         | 16         | 17         | 17         | 16         |
| Front-to-Back Ratio at 180°, dB   | 29         | 30         | 27         | 28         | 31         |
| CPR at Boresight, dB              | 20         | 16         | 19         | 23         | 22         |
| Isolation, Cross Polarization, 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 |

# NHH-55C-HG-R2B

|                                                     |      |      |      |      |      |
|-----------------------------------------------------|------|------|------|------|------|
| <b>PIM, 3rd Order, 2 x 20 W, dBc</b>                | -153 | -153 | -153 | -153 | -153 |
| <b>Input Power per Port at 50°C, maximum, watts</b> | 300  | 300  | 250  | 250  | 250  |

## Mechanical Specifications

|                                         |                                           |
|-----------------------------------------|-------------------------------------------|
| <b>Wind Loading @ Velocity, frontal</b> | 382.0 N @ 150 km/h (85.9 lbf @ 150 km/h)  |
| <b>Wind Loading @ Velocity, lateral</b> | 346.0 N @ 150 km/h (77.8 lbf @ 150 km/h)  |
| <b>Wind Loading @ Velocity, maximum</b> | 768.0 N @ 150 km/h (172.7 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, rear</b>    | 437.0 N @ 150 km/h (98.2 lbf @ 150 km/h)  |
| <b>Wind Speed, maximum</b>              | 241 km/h (150 mph)                        |

## Packaging and Weights

|                       |                      |
|-----------------------|----------------------|
| <b>Width, packed</b>  | 505 mm   19.882 in   |
| <b>Depth, packed</b>  | 386 mm   15.197 in   |
| <b>Length, packed</b> | 2570 mm   101.181 in |
| <b>Weight, gross</b>  | 48.4 kg   106.704 lb |

## Regulatory Compliance/Certifications

|               |                       |
|---------------|-----------------------|
| <b>Agency</b> | <b>Classification</b> |
| 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

|                         |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| <b>Performance Note</b> | Severe environmental conditions may degrade optimum performance |
|-------------------------|-----------------------------------------------------------------|