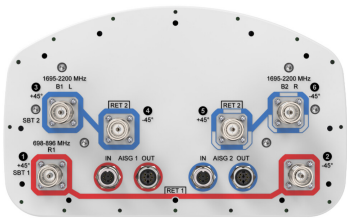


# NHH-65C-HG-R2B



6-port Next Generation PerforMax™ sector antenna, 2x 698–896 and 4x 1695–2200 MHz, 65° 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 body grounded to reflector and mounting bracket |
| Performance Note                | Outdoor usage                                                |
| Radome Material                 | Fiberglass, UV resistant                                     |
| Radiator Material               | Copper   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           | 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            | Low band (1)   Mid band (1)       |

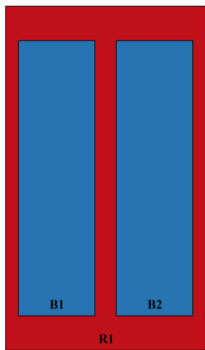
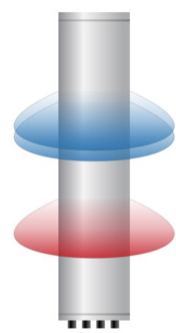
# NHH-65C-HG-R2B

|                                          |                            |
|------------------------------------------|----------------------------|
| Power Consumption, active state, maximum | 10 W                       |
| Power Consumption, idle state, maximum   | 2 W                        |
| Protocol                                 | 3GPP/AISG 2.0 (Single RET) |

## Dimensions

|                                  |                     |
|----------------------------------|---------------------|
| Width                            | 301 mm   11.85 in   |
| Depth                            | 180 mm   7.087 in   |
| Length                           | 2438 mm   95.984 in |
| Net Weight, without mounting kit | 24.4 kg   53.793 lb |

## Array Layout

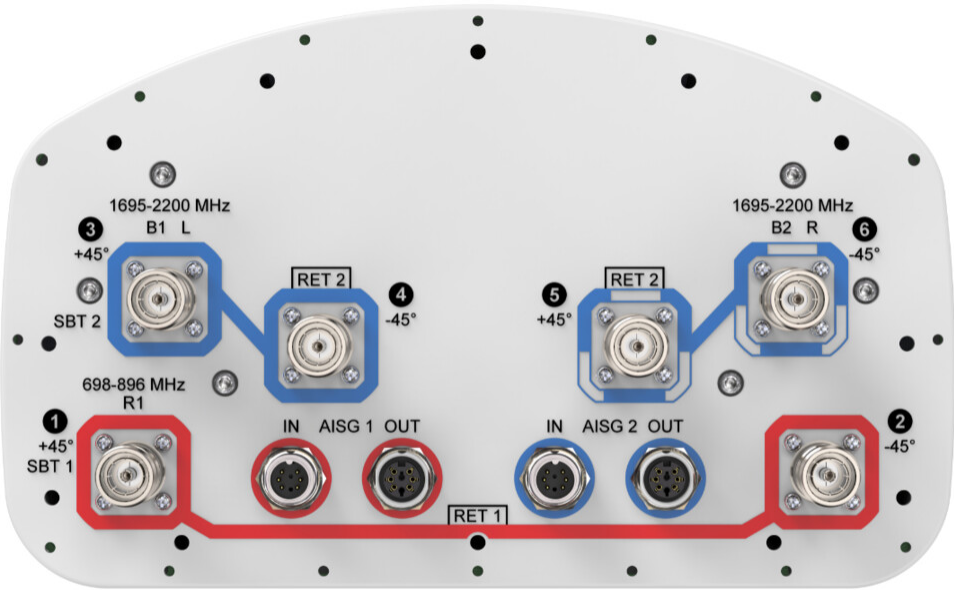


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | SBT RF PORT | SBT No. | RET UID          |
|----------|-----------------|--------------|------------|----------|-------------|---------|------------------|
| R1       | 698-896         | 1 - 2        | 1          | AISG1    | 1           | 1       | CPxxxxxxxxxxxxR1 |
| B1       | 1695-2200       | 3 - 4        | 2          | AISG2    | 3           | 2       | CPxxxxxxxxxxxxB1 |
| B2       | 1695-2200       | 5 - 6        |            |          |             |         |                  |

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

## Port Configuration

# NHH-65C-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               | 698–798 | 824–896 | 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                | 17.4    | 17.4    | 19.4      | 19.5      | 20.1      |
| Gain, dBi                         | 17      | 17.3    | 19.1      | 19.3      | 19.8      |
| Beamwidth, Horizontal, degrees    | 65      | 60      | 66        | 65        | 63        |
| Beamwidth, Vertical, degrees      | 8.7     | 7.7     | 5.2       | 4.9       | 4.7       |
| Beam Tilt, degrees                | 0–11    | 0–11    | 0–7       | 0–7       | 0–7       |
| USLS (First Lobe), dB             | 16      | 16      | 17        | 18        | 18        |
| Front-to-Back Ratio at 180°, dB   | 30      | 31      | 37        | 35        | 37        |
| CPR at Boresight, dB              | 17      | 14      | 17        | 18        | 19        |
| Isolation, Cross Polarization, dB | 25      | 25      | 25        | 25        | 25        |

# NHH-65C-HG-R2B

|                                                     |            |            |            |            |            |
|-----------------------------------------------------|------------|------------|------------|------------|------------|
| <b>VSWR   Return loss, dB</b>                       | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 | 1.5   14.0 |
| <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> | 393.0 N @ 150 km/h (88.3 lbf @ 150 km/h)  |
| <b>Wind Loading @ Velocity, lateral</b> | 330.0 N @ 150 km/h (74.2 lbf @ 150 km/h)  |
| <b>Wind Loading @ Velocity, maximum</b> | 757.0 N @ 150 km/h (170.2 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, rear</b>    | 398.0 N @ 150 km/h (89.5 lbf @ 150 km/h)  |
| <b>Wind Speed, maximum</b>              | 241 km/h (150 mph)                        |

## Packaging and Weights

|                       |                      |
|-----------------------|----------------------|
| <b>Width, packed</b>  | 380 mm   14.961 in   |
| <b>Depth, packed</b>  | 295 mm   11.614 in   |
| <b>Length, packed</b> | 2571 mm   101.221 in |
| <b>Weight, gross</b>  | 36.8 kg   81.13 lb   |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>                                                                                                          |
|---------------|--------------------------------------------------------------------------------------------------------------------------------|
| CHINA-ROHS    | Below maximum concentration value                                                                                              |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| 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

|                         |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| <b>Performance Note</b> | 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

| Agency        | Classification                                                                                                           |
|---------------|--------------------------------------------------------------------------------------------------------------------------|
| CE            | Compliant with the relevant CE product directives                                                                        |
| CHINA-ROHS    | Below maximum concentration value                                                                                        |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system                                           |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a> |
| ROHS          | Compliant                                                                                                                |
| UK-ROHS       | Compliant                                                                                                                |

