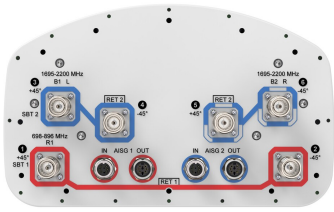


NHH-65A-HG-R2B



6-port Next Generation High Performance sector antenna, 2x 698–896 and 4x 1695–2200 MHz, 65° HPBW, 2x RET

- Antenna optimized for higher gain with improved radiation efficiency
- Designed to reduce SUB 1 alarm triggers with pattern consistency between low band and mid band
- Powered by CommScope’s next generation high-efficiency SEED™ technology
- Interleaved dipole technology results into an attractive, low wind load mechanical package
- Enhanced interference mitigation for improved SINR and throughput
- Internal SBTs allow remote RET control from the radio over the RF jumper cable

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, high band | 0 |
| 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) |

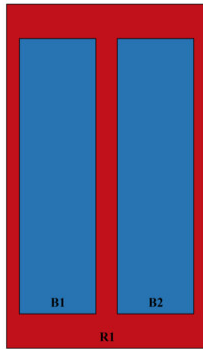
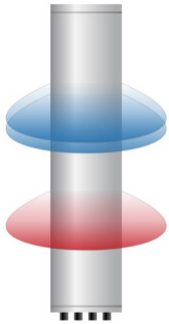
NHH-65A-HG-R2B

| | |
|-------------------------------------------------|----------------------------|
| 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 | 181 mm 7.126 in |
| Length | 1413 mm 55.63 in |
| Net Weight, antenna only | 20.5 kg 45.195 lb |

Array Layout

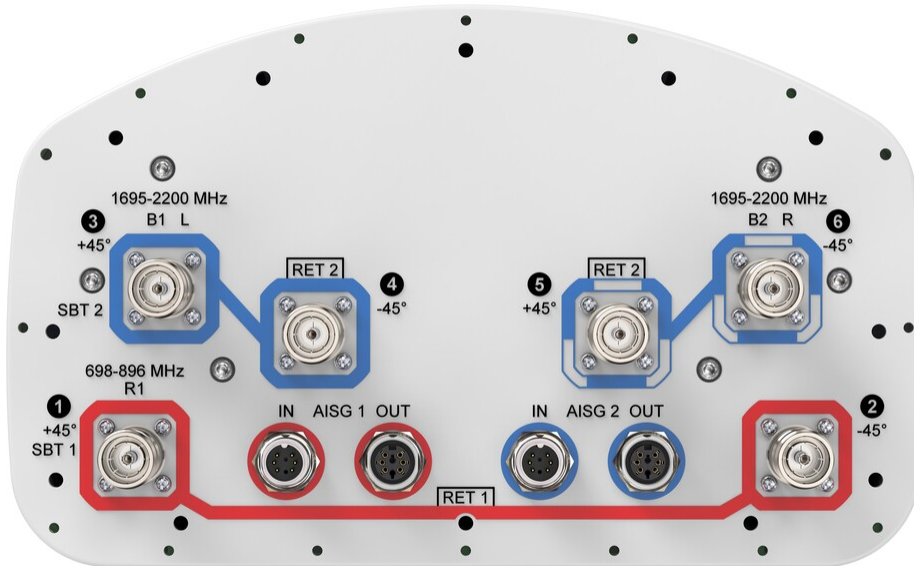


| ArrayID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | SBT RF PORT | SBT No. | RET UID |
|---------|-----------------|--------------|------------|----------|-------------|---------|----------------------|
| R1 | 698-896 | 1 - 2 | 1 | AISG1 | 1 | 1 | CPxxxxxxxxxxxxxxxxR1 |
| B1 | 1695-2200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

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

Port Configuration

NHH-65A-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, dBi | 14.4 | 14.3 | 17.2 | 18 | 17.9 |
| Beamwidth, Horizontal, degrees | 66 | 63 | 66 | 61 | 64 |
| Beamwidth, Vertical, degrees | 16.4 | 14.7 | 7.1 | 6.5 | 6.3 |
| Beam Tilt, degrees | 0–18 | 0–18 | 0–10 | 0–10 | 0–10 |
| USLS (First Lobe), dB | 19 | 15 | 18 | 20 | 19 |
| Front-to-Back Ratio at 180°, dB | 25 | 31 | 35 | 34 | 29 |
| 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-65A-HG-R2B

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

Mechanical Specifications

| | |
|-----------------------------------------|------------------------------------------|
| Wind Loading @ Velocity, frontal | 206.0 N @ 150 km/h (46.3 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 169.0 N @ 150 km/h (38.0 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 396.0 N @ 150 km/h (89.0 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 208.0 N @ 150 km/h (46.8 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 | 1537 mm 60.512 in |
| Weight, gross | 31.1 kg 68.564 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--------------------------------------------------------------------------------|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

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 |
|-------------------------|-----------------------------------------------------------------|