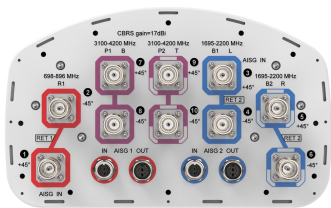


NHHSS-65A-R2BT4



10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100–4200 MHz, 65° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

- Perfect antenna to add 3.5GHz CBRS to macro sites
- Low band and mid band performance mirrors the performance of existing NHH hex port antennas
- 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
- One LB RET and one HB RET. Both high bands are controlled by one RET to ensure same tilt level for 4x MIMO

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, high band | 4 |
| RF Connector Quantity, mid band | 4 |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 10 |

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 |

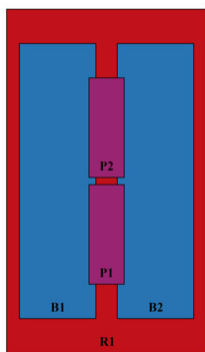
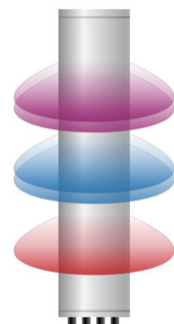
NHHSS-65A-R2BT4

| | |
|--|-----------------------------|
| 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 |
| 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 | 19.5 kg 42.99 lb |

Array Layout

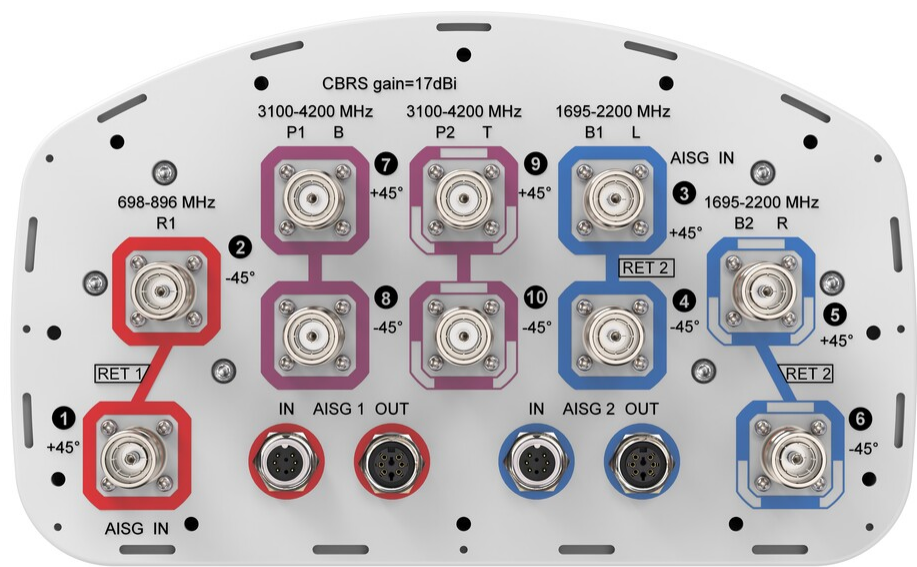


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|------------|----------|--------------------|
| R1 | 698-896 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxxxR1 |
| B1 | 1695-2200 | 3 - 4 | 2 | AISG2 | CPxxxxxxxxxxxxxxB1 |
| B2 | 1695-2200 | 5 - 6 | | | |
| P1 | 3100-4200 | 7 - 8 | N/A | NA | N/A |
| P2 | 3100-4200 | 9 - 10 | | | |

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

Port Configuration

NHHSS-65A-R2BT4



Electrical Specifications

| | |
|----------------------------|---|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2200 MHz 3100 – 4200 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 | P1,P2 | P1,P2 | P1,P2 |
|-----------------------------------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 | 3100–3550 | 3550–3700 | 3700–4200 |
| RF Port | 1,2 | 1,2 | 3,4,5,6 | 3,4,5,6 | 3,4,5,6 | 7,8,9,10 | 7,8,9,10 | 7,8,9,10 |
| Gain, dBi | 13.8 | 13.9 | 16.2 | 16.7 | 16.9 | 16.9 | 16.5 | 16.8 |
| Beamwidth, Horizontal, degrees | 67 | 64 | 69 | 62 | 62 | 56 | 67 | 62 |
| Beamwidth, Vertical, degrees | 16.2 | 14.4 | 7 | 6.6 | 6.4 | 7.5 | 6.9 | 6.3 |
| Beam Tilt, degrees | 0–18 | 0–18 | 0–10 | 0–10 | 0–10 | 4 | 4 | 4 |
| USLS (First Lobe), dB | 16 | 16 | 17 | 16 | 17 | 16 | 18 | 17 |
| Front-to-Back Ratio at 180°, dB | 29 | 27 | 30 | 28 | 27 | 31 | 32 | 29 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

NHHSS-65A-R2BT4

| | | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|------------|------------|
| 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 | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -140 | -140 | -140 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 300 | 300 | 100 | 100 | 100 |

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 | 30.1 kg 66.359 lb |

Regulatory Compliance/Certifications

| | |
|---------------|--|
| Agency | Classification |
| CHINA-ROHS | Below maximum concentration value |
| REACH-SVHC | Compliant as per SVHC revision on www.andrew.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 |
|-------------------------|---|

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 www.andrew.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

