

NHHSS-45C-R2BT4



10-port sector antenna, 2x 698–896, 4x 1695–2200 MHz and 4x 3100–4200, 45° 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
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- 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 |
| Reflector Material | Aluminum |
| 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 | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 2 female 2 male |

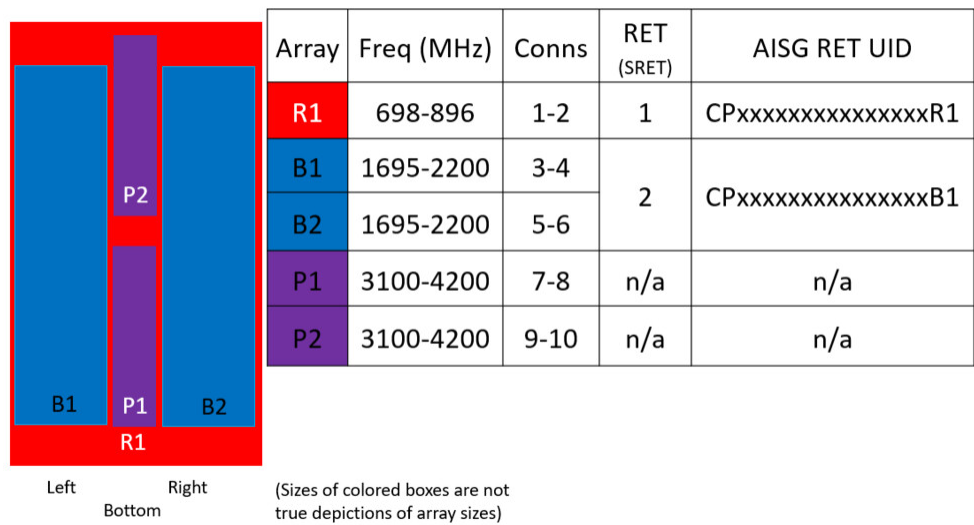
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| | |
|------------------------------------------|-----------------------------|
| Input Voltage | 10–30 Vdc |
| Internal RET | Low band (1) Mid band (1) |
| Power Consumption, active state, maximum | 10 W |
| Power Consumption, idle state, maximum | 2 W |
| Protocol | 3GPP/AISG 2.0 |

Dimensions

| | |
|--------------------------|---------------------|
| Width | 457 mm 17.992 in |
| Depth | 178 mm 7.008 in |
| Length | 2437 mm 95.945 in |
| Net Weight, antenna only | 41.5 kg 91.492 lb |

Array Layout



Port Configuration

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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 | 18 | 18.6 | 19.3 | 19.7 | 20.3 | 16.9 | 17.4 | 17.4 |
| Beamwidth, Horizontal, degrees | 46 | 41 | 45 | 43 | 41 | 49 | 42 | 40 |
| Beamwidth, Vertical, degrees | 9.3 | 8.2 | 5.7 | 5.4 | 5.1 | 9.7 | 9 | 8.4 |
| Beam Tilt, degrees | 0–10 | 0–10 | 0–8 | 0–8 | 0–8 | 4 | 4 | 4 |
| USLS (First Lobe), dB | 18 | 22 | 15 | 16 | 16 | 18 | 17 | 13 |
| Front-to-Back Ratio at 180°, dB | 32 | 34 | 33 | 34 | 36 | 32 | 33 | 29 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

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| | | | | | | | | |
|----------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Isolation, Inter-band, dB | 30 | 30 | 28 | 28 | 28 | 28 | 28 | 28 |
| 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 | 250 | 250 | 250 | 250 | 250 | 100 | 100 | 100 |

Mechanical Specifications

| | |
|----------------------------------|---------------------------------------------|
| Wind Loading @ Velocity, frontal | 1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 315.0 N @ 150 km/h (70.8 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 1,304.0 N @ 150 km/h (293.2 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------|---------------------|
| Width, packed | 526 mm 20.709 in |
| Depth, packed | 283 mm 11.142 in |
| Length, packed | 2604 mm 102.52 in |
| Weight, gross | 60.5 kg 133.38 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|------------|-----------------------------------|
| CHINA-ROHS | Above maximum concentration value |
| 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. |
| BSAMNT-M | – | Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor 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 |



BSAMNT-M



Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor 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 4.5 kg | 9.921 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--------------------------------------------------------------------------------------------------------------------------|
| 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 |

