

NNH4SS-65C-R3BT8



16- Port sector antenna, 4x 698-896, 8x 1695-2360 and 4x 3550-3700MHz, 65° HPBW, 3x RETs and 3x SBTs

- Features broadband Low Band (698-896 MHz), Mid Band(1695-2360 MHz) and High Band (3550-3700 MHz) arrays for 4T4R (4X MIMO) capability for bands 5, 13, 25, 66 and 48. Also covers bands 12, 14, 29, and 30
- Perfect antenna to add 3.5GHz CBRS to macro sites
- Non-stacked high band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs
- Array configuration provides capability for 4T4R (4X MIMO) on Low Band, dual 4T4R (4X MIMO) on Mid Band and 4T4R (4X MIMO) on High Band
- Excellent wind loading characteristics

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 | 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 | 8 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 16 |

Remote Electrical Tilt (RET) Information

| | |
|-------------------------|-----------------------------------|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 3 female 3 male |
| Input Voltage | 10–30 Vdc |

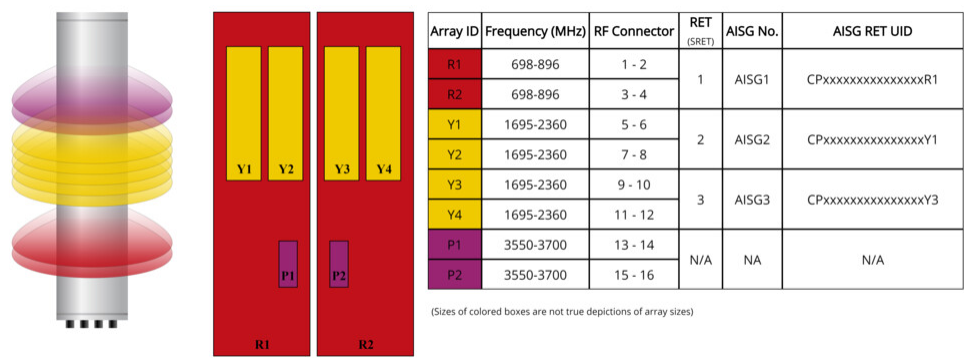
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| | |
|--|-----------------------------|
| Internal Bias Tee | Port 1 Port 5 Port 9 |
| Internal RET | Low band (1) Mid band (2) |
| Power Consumption, active state, maximum | 10 W |
| Power Consumption, idle state, maximum | 2 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

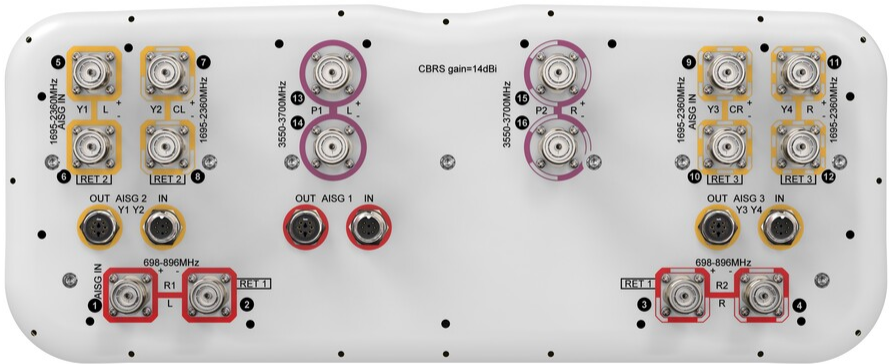
| | |
|--------------------------|----------------------|
| Width | 498 mm 19.606 in |
| Depth | 197 mm 7.756 in |
| Length | 2438 mm 95.984 in |
| Net Weight, antenna only | 46.4 kg 102.294 lb |

Array Layout



Port Configuration

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Electrical Specifications

| | |
|----------------------------|---|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2360 MHz 3550 – 3700 MHz 698 – 896 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 1,600 W @ 50 °C |

Electrical Specifications

| | R1,R2 | R1,R2 | Y1-Y4 | Y1-Y4 | Y1-Y4 | Y1-Y4 | P1,P2 |
|---------------------------------|---------|---------|-----------|-----------|-----------|-----------|-----------|
| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2360 | 3550–3700 |
| RF Port | 1-4 | 1-4 | 5-12 | 5-12 | 5-12 | 5-12 | 13-16 |
| Gain, dBi | 15.5 | 16 | 17.1 | 17.6 | 18.2 | 18.4 | 14 |
| Beamwidth, Horizontal, degrees | 73 | 65 | 69 | 68 | 64 | 59 | 63 |
| Beamwidth, Vertical, degrees | 9.6 | 8.4 | 5.7 | 5.3 | 5 | 4.6 | 16.6 |
| Beam Tilt, degrees | 0–10 | 0–10 | 0–10 | 0–10 | 0–10 | 0–10 | 8 |
| USLS (First Lobe), dB | 15 | 18 | 18 | 19 | 20 | 21 | 18 |
| Front-to-Back Ratio at 180°, dB | 31 | 31 | 31 | 31 | 32 | 33 | 33 |
| Isolation, Cross Polarization, | 25 | 25 | 25 | 25 | 25 | 25 | 25 |

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| dB | | | | | | | |
|--|------------|------------|------------|------------|------------|------------|------------|
| Isolation, Inter-band, dB | 25 | 25 | 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 | 1.5 14.0 | 1.5 14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 | -145 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 250 | 250 | 200 | 100 |

Mechanical Specifications

| | |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 865.0 N @ 150 km/h (194.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 268.0 N @ 150 km/h (60.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,037.0 N @ 150 km/h (233.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 595.0 N @ 150 km/h (133.8 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------|----------------------|
| Width, packed | 565 mm 22.244 in |
| Depth, packed | 309 mm 12.165 in |
| Length, packed | 2685 mm 105.709 in |
| Weight, gross | 66.3 kg 146.166 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|------------|-----------------------------------|
| CHINA-ROHS | Above maximum concentration value |
| ROHS | Compliant/Exempted |
| 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. |
| 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 |

