

NNH4-45A-R3B-V1

12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 45° HPBW, 3x RET



- Features broadband Low Band (698-896 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for Band 14, AWS, PCS and WCS applications
- Independent tilt for all arrays
- Optimized SPR performance across all operating bands
- 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 | Aluminum Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 4.3-10 Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 8 |
| RF Connector Quantity, mid band | 0 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 12 |

Remote Electrical Tilt (RET) Information

| | |
|--|-----------------------------------|
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 3 female 3 male |
| Input Voltage | 10–30 Vdc |
| Internal Bias Tee | Port 1 Port 3 Port 5 |
| Internal RET | High band (2) Low band (1) |
| Power Consumption, idle state, maximum | 1 W |
| Power Consumption, normal conditions, maximum | 8 W |

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Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

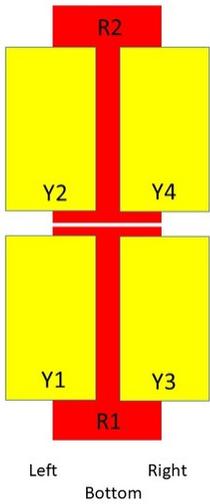
Width 457 mm | 17.992 in

Depth 178 mm | 7.008 in

Length 1399 mm | 55.079 in

Net Weight, without mounting kit 30.2 kg | 66.58 lb

Array Layout

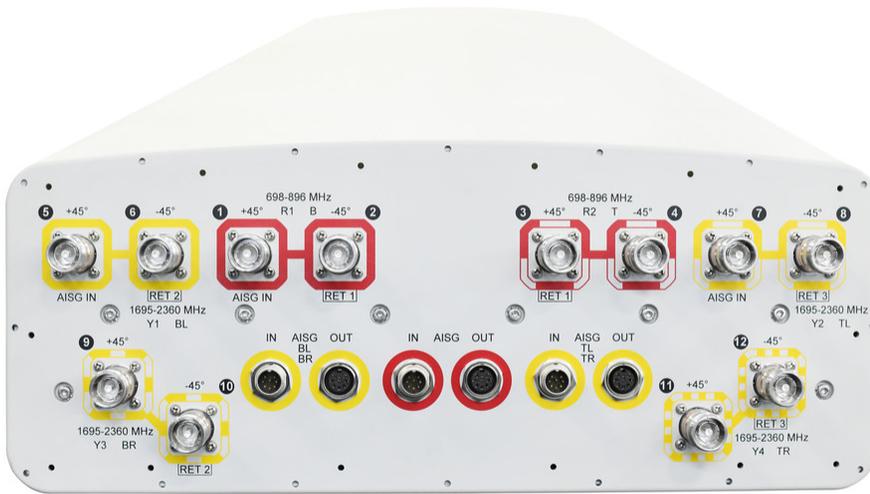


| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|----------------------|
| R1 | 698-896 | 1-2 | 1 | ANxxxxxxxxxxxxxxxxx1 |
| R2 | 698-896 | 3-4 | | |
| Y1 | 1695-2360 | 5-6 | 2 | ANxxxxxxxxxxxxxxxxx2 |
| Y3 | 1695-2360 | 9-10 | | |
| Y2 | 1695-2360 | 7-8 | 3 | ANxxxxxxxxxxxxxxxxx3 |
| Y4 | 1695-2360 | 11-12 | | |

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

Port Configuration

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Electrical Specifications

| | |
|-----------------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2360 MHz 698 – 896 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 900 W @ 50 °C |

Electrical Specifications

| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2360 |
|--|----------|----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 12.9 | 13.8 | 15.4 | 16 | 16.3 | 16.8 |
| Beamwidth, Horizontal, degrees | 49 | 43 | 44 | 43 | 41 | 38 |
| Beamwidth, Vertical, degrees | 35.5 | 30.4 | 15.2 | 13.9 | 13 | 11.6 |
| Beam Tilt, degrees | 2–18 | 2–18 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 16 | 17 | 16 | 15 | 15 | 15 |
| Front-to-Back Ratio at 180°, dB | 30 | 30 | 33 | 34 | 34 | 36 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 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 |

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| | | | | | | |
|---|------|------|------|------|------|------|
| PIM, 3rd Order, 2 x 20 W, dBc | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 250 | 250 | 250 | 200 |

Mechanical Specifications

| | |
|---|---|
| Effective Projective Area (EPA), frontal | 0.74 m ² 7.965 ft ² |
| Effective Projective Area (EPA), lateral | 0.15 m ² 1.615 ft ² |
| Mechanical Tilt Range | 0°–22° |
| Wind Loading @ Velocity, frontal | 788.0 N @ 150 km/h (177.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 159.0 N @ 150 km/h (35.7 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 788.0 N @ 150 km/h (177.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 692.0 N @ 150 km/h (155.6 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 | 1566 mm 61.654 in |
| Weight, gross | 42.3 kg 93.255 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Above maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| 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. |
|----------|---|--|

* 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-3

