

NNH4-65A-R6



12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 6x RET.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

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 Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| 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 Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (4) Low band (2) |

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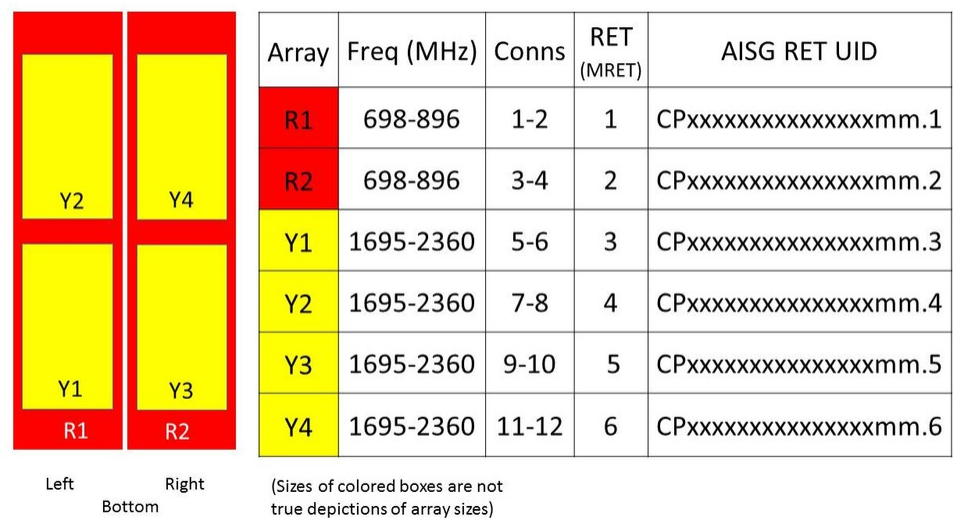
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|---|---------------------------|
| Power Consumption, idle state, maximum | 1 W |
| Power Consumption, normal conditions, maximum | 8 W |
| Protocol | 3GPP/AISG 2.0 (Multi-RET) |

Dimensions

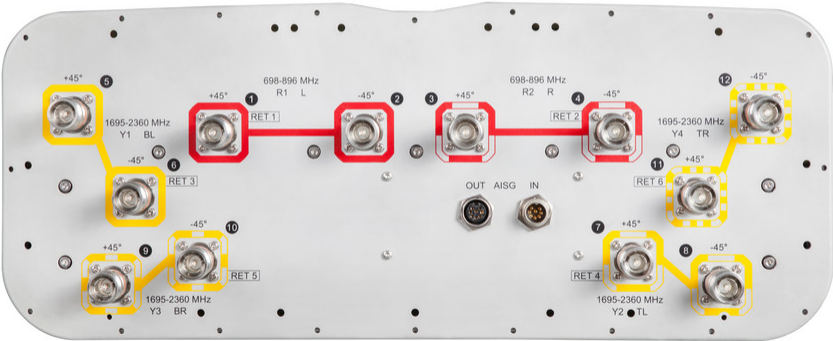
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| Width | 498 mm 19.606 in |
| Depth | 197 mm 7.756 in |
| Length | 1400 mm 55.118 in |
| Net Weight, without mounting kit | 33.5 kg 73.855 lb |

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Array Layout



Port Configuration



Electrical Specifications

| | |
|--------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2360 MHz 698 – 896 MHz |

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| | |
|----------------------------|---------------|
| 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 | 13.2 | 13.8 | 14 | 14.7 | 14.8 | 15.2 |
| Beamwidth, Horizontal, degrees | 72 | 63 | 59 | 60 | 62 | 59 |
| Beamwidth, Vertical, degrees | 16.4 | 14.9 | 15.7 | 14.6 | 13.9 | 12.4 |
| Beam Tilt, degrees | 2–16 | 2–16 | 2–16 | 2–16 | 2–16 | 2–16 |
| USLS (First Lobe), dB | 15 | 19 | 16 | 18 | 17 | 18 |
| Front-to-Back Ratio at 180°, dB | 29 | 30 | 34 | 35 | 34 | 35 |
| 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 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port at 50°C, maximum, watts | 250 | 250 | 250 | 250 | 250 | 200 |

Mechanical Specifications

| | |
|--|---|
| Effective Projective Area (EPA), frontal | 0.48 m² 5.167 ft² |
| Effective Projective Area (EPA), lateral | 0.16 m² 1.722 ft² |
| Mechanical Tilt Range | 0°–15° |
| Wind Loading @ Velocity, frontal | 509.0 N @ 150 km/h (114.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 169.0 N @ 150 km/h (38.0 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 660.0 N @ 150 km/h (148.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 419.0 N @ 150 km/h (94.2 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|----------------|---------------------|
| Width, packed | 608 mm 23.937 in |
| Depth, packed | 352 mm 13.858 in |
| Length, packed | 1582 mm 62.283 in |

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Weight, gross 41 kg | 90.389 lb

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.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |



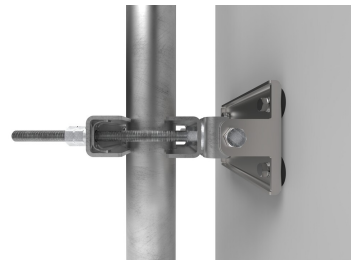
Included Products

| | | |
|-----------|---|--|
| BSAMNT-2F | – | Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications. |
|-----------|---|--|

* Footnotes

| | |
|-------------------------|---|
| Performance Note | Severe environmental conditions may degrade optimum performance |
|-------------------------|---|

BSAMNT-2F



Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

Product Classification

Product Type Fixed tilt 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 3.8 kg | 8.378 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 4 kg | 8.818 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-2F

