

NNH4-65C-R6



12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 6x 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
- 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 |
| Grounding Type | RF connector inner conductor and 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 | 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 |

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| | |
|--|------------------------------|
| Internal RET | High band (4) Low band (2) |
| Power Consumption, idle state, maximum | 1 W |
| Power Consumption, normal conditions, maximum | 8 W |
| Protocol | 3GPP/AISG 2.0 (Multi-RET) |

Dimensions

| | |
|---|---------------------|
| Width | 498 mm 19.606 in |
| Depth | 197 mm 7.756 in |
| Length | 2438 mm 95.984 in |
| Net Weight, without mounting kit | 39.9 kg 87.964 lb |

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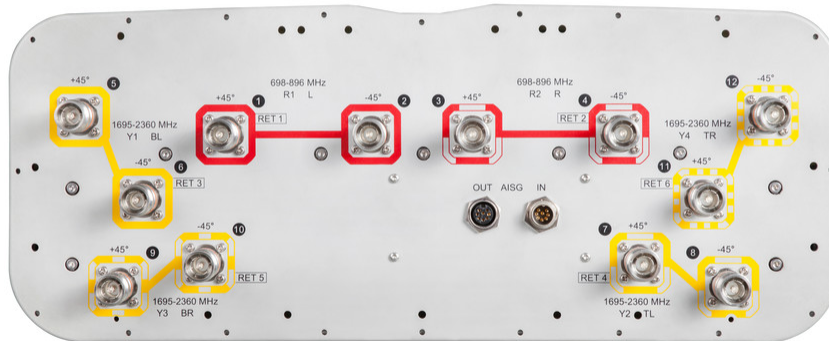
Array Layout

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

Left Bottom Right

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

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 | 15.7 | 16.1 | 17 | 17.5 | 17.7 | 17.8 |
| Beamwidth, Horizontal, degrees | 75 | 73 | 58 | 59 | 61 | 59 |
| Beamwidth, Vertical, degrees | 9.7 | 8.6 | 7.9 | 7.4 | 7 | 6.3 |
| Beam Tilt, degrees | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 19 | 19 | 17 | 18 | 20 | 18 |
| Front-to-Back Ratio at 180°, dB | 32 | 33 | 39 | 42 | 39 | 40 |
| 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 | 300 | 300 | 250 | 250 | 250 | 200 |

Mechanical Specifications

| | |
|---|---|
| Effective Projective Area (EPA), frontal | 0.9 m ² 9.688 ft ² |
| Effective Projective Area (EPA), lateral | 0.31 m ² 3.337 ft ² |
| Mechanical Tilt Range | 0°–10° |
| Wind Loading @ Velocity, frontal | 954.0 N @ 150 km/h (214.5 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 331.0 N @ 150 km/h (74.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,235.0 N @ 150 km/h (277.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 785.0 N @ 150 km/h (176.5 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 | 2625 mm 103.347 in |

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Weight, gross

52.6 kg | 115.963 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-2F

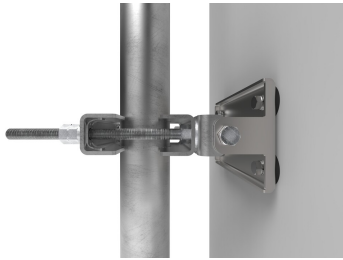
- Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

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

BSAMNT-2F

