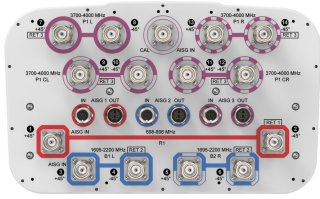


NHHS4-65B-R3B



14 Port Sector Antenna, 2x698-896 MHz, 4x1695-2200 MHz 65° HPBW, and 8x3700-4000 MHz Beamformer, 3XRET

General Specifications

| | |
|---|--|
| Antenna Type | Sector and beamforming |
| Band | Multiband |
| Calibration Connector Interface | 4.3-10 Female |
| Calibration Connector Quantity | 1 |
| 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 | 8 |
| RF Connector Quantity, mid band | 4 |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 14 |

Remote Electrical Tilt (RET) Information

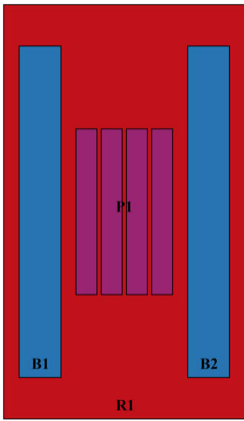
| | |
|--------------------------------|---|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 3 female 3 male |
| Input Voltage | 10–30 Vdc |
| Internal Bias Tee | Cal Port Port 1 Port 3 |
| Internal RET | High band (1) Low band (1) Mid band (1) |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

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Dimensions

| | |
|---------------------------------|---------------------|
| Width | 350 mm 13.78 in |
| Depth | 208 mm 8.189 in |
| Length | 1828 mm 71.969 in |
| Net Weight, antenna only | 27 kg 59.525 lb |

Array Layout

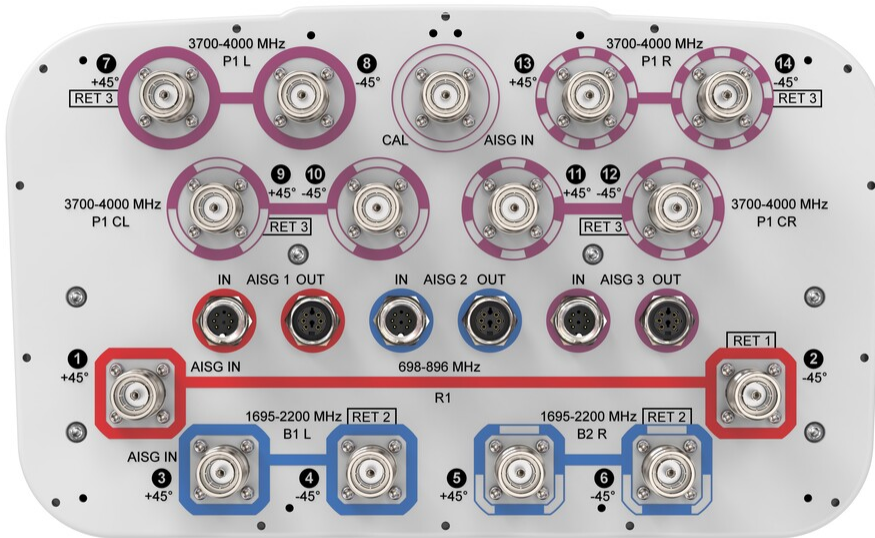


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG RET UID |
|----------|-----------------|--------------|---------------|------------------|
| R1 | 698-896 | 1 - 2 | 1 | CPxxxxxxxxxxxxR1 |
| B1 | 1695-2200 | 3 - 4 | 2 | CPxxxxxxxxxxxxB1 |
| B2 | 1695-2200 | 5 - 6 | | |
| P1 | 3700-4000 | 7 - 14 | 3 | CPxxxxxxxxxxxxP1 |

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

Port Configuration

NHHS4-65B-R3B



Electrical Specifications

| | |
|-----------------------------------|---|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2200 MHz 3700 – 4000 MHz 698 – 896 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 1,040 W @ 50 °C |

Electrical Specifications

| | R1 | R1 | B1,B2 | B1,B2 | B1,B2 | P1 |
|--|----------------|----------------|------------------|------------------|------------------|------------------|
| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 | 3700–4000 |
| RF Port | 1-2 | 1-2 | 3-6 | 3-6 | 3-6 | 7-14 |
| Gain, dBi | 15 | 15.1 | 17.7 | 18.1 | 18.2 | 15.9 |
| Beamwidth, Horizontal, degrees | 66 | 64 | 63 | 61 | 64 | 85 |
| Beamwidth, Vertical, degrees | 11.5 | 10.4 | 5.6 | 5.3 | 5 | 5.7 |
| Beam Tilt, degrees | 0–11 | 0–11 | 0–10 | 0–10 | 0–10 | 0–10 |
| USLS (First Lobe), dB | 15 | 15 | 17 | 20 | 21 | 13 |
| Front-to-Back Ratio at 180°, dB | 37 | 34 | 34 | 35 | 33 | 30 |

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| | | | | | | |
|--|------------|------------|------------|------------|------------|------------|
| Coupling level, Amp, Antenna port to Cal port, dB | | | | | | 26 |
| Coupling level, max Amp Δ, Antenna port to Cal port, dB | | | | | | ± 2 |
| Coupler, max Amp Δ, Antenna port to Cal port, dB | | | | | | 0.5 |
| Coupler, max Phase Δ, Antenna port to Cal port, degrees | | | | | | 5 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Co-polarization, dB | | | | | | 19 |
| 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 | -153 | -153 | -153 | -153 | -153 | -145 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 250 | 250 | 250 | 75 |

Electrical Specifications, Broadcast 65°

| | |
|---|------------------|
| Frequency Band, MHz | 3700–4000 |
| Gain, dBi | 16.8 |
| Beamwidth, Horizontal, degrees | 65 |
| Beamwidth, Vertical, degrees | 5.7 |
| Beamwidth, Vertical Tolerance, degrees | ± 0.3 |
| Front-to-Back Total Power at 180° \pm 30°, dB | 25 |
| USLS (First Lobe), dB | 15 |

Electrical Specifications, Envelope Pattern

| | |
|----------------------------|------------------|
| Frequency Band, MHz | 3700–4000 |
| Gain, dBi | 20.5 |

Electrical Specifications, Service Beam

| | |
|--|------------------|
| Frequency Band, MHz | 3700–4000 |
| Steered 0° Gain, dBi | 20.5 |
| Steered 0° Gain Tolerance, dBi | ± 0.5 |
| Steered 0° Beamwidth, Horizontal, degrees | 22 |

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| | |
|--|------|
| Steered 0° Front-to-Back Total Power at 180° ± 30°, dB | 29 |
| Steered 0° Horizontal Sidelobe, dB | 12 |
| Steered 30° Gain, dBi | 19.5 |
| Steered 30° Gain Tolerance, dBi | ±0.9 |
| Steered 30° Beamwidth, Horizontal, degrees | 28 |
| Steered 30° Front-to-Back Total Power at 180° ± 30°, dB | 26 |

Electrical Specifications, Soft Split

| | |
|--|------------------|
| Frequency Band, MHz | 3700–4000 |
| Gain, dBi | 18.9 |
| Beamwidth, Horizontal, degrees | 32 |
| Front-to-Back Total Power at 180° ± 30°, dB | 26 |
| Horizontal Sidelobe, dB | 16 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 301.0 N @ 150 km/h (67.7 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 254.0 N @ 150 km/h (57.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 638.0 N @ 150 km/h (143.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 319.0 N @ 150 km/h (71.7 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 456 mm 17.953 in |
| Depth, packed | 357 mm 14.055 in |
| Length, packed | 1975 mm 77.756 in |
| Weight, gross | 39.7 kg 87.523 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|-----------------------------------|
| CHINA-ROHS | Above maximum concentration value |

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| | |
|---------------|--|
| 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

