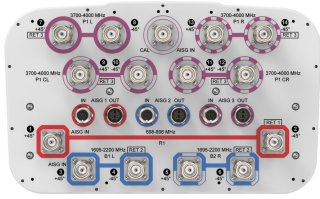


NHHS4-65C-R3B



14 Port Sector Antenna, 2x698-896 MHz, 4x1695-2200 MHz 65 deg 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

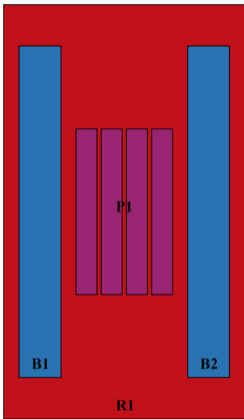
| | |
|--------------------------------|---|
| RET Hardware | CommRET v2 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 3 female 3 male |
| Input Voltage | 10–30 Vdc |
| Internal Bias Tee | Cal Port Port 1 Port 3 |
| Internal RET | High band (1) Low band (1) Mid band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

NHHS4-65C-R3B

Dimensions

| | |
|---------------------------------|---------------------|
| Width | 350 mm 13.78 in |
| Depth | 208 mm 8.189 in |
| Length | 2438 mm 95.984 in |
| Net Weight, antenna only | 32.7 kg 72.091 lb |

Array Layout

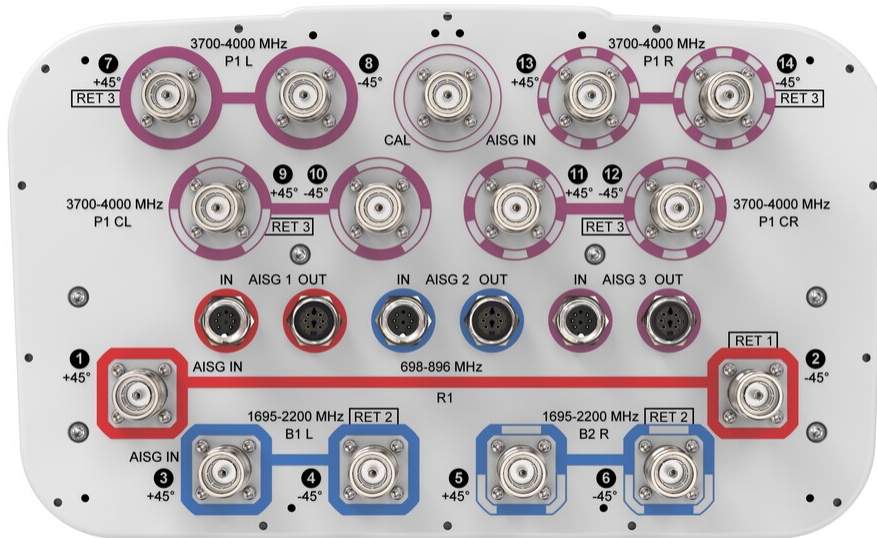


| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG RET UID |
|----------|-----------------|--------------|---------------|------------------|
| R1 | 698-896 | 1 - 2 | 1 | CPxxxxxxxxxxxxR1 |
| B1 | 1695-2200 | 3 - 4 | 2 | CPxxxxxxxxxxxxB1 |
| B2 | 1695-2200 | 5 - 6 | | |
| P1 | 3700-4000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

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

Port Configuration

NHHS4-65C-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 | 16 | 16 | 17.8 | 18.2 | 18.2 | 16.3 |
| Beamwidth, Horizontal, degrees | 65 | 63 | 62 | 61 | 65 | 79 |
| Beamwidth, Vertical, degrees | 9.6 | 8.6 | 5.5 | 5.2 | 5 | 5.7 |
| Beam Tilt, degrees | 0–11 | 0–11 | 0–10 | 0–10 | 0–10 | 0–10 |
| USLS (First Lobe), dB | 20 | 19 | 19 | 22 | 24 | 13 |
| Front-to-Back Ratio at 180°, dB | 39 | 31 | 33 | 37 | 37 | 31 |

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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, BASTA

| Frequency Band, MHz | 698–806 | 806–896 | 1695–1880 | 1850–1990 | 1920–2200 | 3700–4000 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|
| Gain by all Beam Tilts, average, dBi | 15.7 | 15.9 | 17.4 | 17.9 | 18 | 15.6 |
| Gain by all Beam Tilts Tolerance, dB | ± 0.3 | ± 0.3 | ± 0.7 | ± 0.2 | ± 0.3 | ± 0.9 |
| Beamwidth, Horizontal Tolerance, degrees | ± 3 | ± 3 | ± 7 | ± 6 | ± 5 | ± 19 |
| Beamwidth, Vertical Tolerance, degrees | ± 0.4 | ± 0.4 | ± 0.3 | ± 0.2 | ± 0.3 | ± 0.4 |
| Front-to-Back Total Power at 180° \pm 30°, dB | 29 | 26 | 26 | 30 | 30 | 23 |
| CPR at Boresight, dB | 23 | 17 | 19 | 22 | 24 | 14 |
| CPR at Sector, dB | 12 | 11 | 10 | 11 | 10 | 5 |

Electrical Specifications, Broadcast 65°

| | |
|--------------------------------|-----------|
| Frequency Band, MHz | 3700–4000 |
| Gain, dBi | 17.1 |
| Beamwidth, Horizontal, degrees | 65 |
| Beamwidth, Vertical, degrees | 5.7 |
| Beamwidth, Vertical | ± 0.3 |

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Tolerance, degrees

USLS (First Lobe), dB 15

Electrical Specifications, Envelope Pattern

Frequency Band, MHz 3700–4000

Gain, dBi 20.8

Electrical Specifications, Service Beam

Frequency Band, MHz 3700–4000

Steered 0° Gain, dBi 20.9

Steered 0° Gain Tolerance, dBi ±0.5

Steered 0° Beamwidth,
Horizontal, degrees 22

Steered 0° Front-to-Back
Total Power at 180° ± 30°, dB 29

Steered 0° Horizontal
Sidelobe, dB 13

Steered 30° Gain, dBi 19.8

Steered 30° Gain Tolerance,
dBi ±0.8

Steered 30° Beamwidth,
Horizontal, degrees 27

Steered 30° Front-to-Back
Total Power at 180° ± 30°, dB 28

Electrical Specifications, Soft Split

Frequency Band, MHz 3700–4000

Gain, dBi 19.2

Beamwidth, Horizontal,
degrees 32

Front-to-Back Total Power at
180° ± 30°, dB 28

Horizontal Sidelobe, dB 16

Mechanical Specifications

Wind Loading @ Velocity, frontal 425.0 N @ 150 km/h (95.5 lbf @ 150 km/h)

Wind Loading @ Velocity, lateral 361.0 N @ 150 km/h (81.2 lbf @ 150 km/h)

Wind Loading @ Velocity, maximum 899.0 N @ 150 km/h (202.1 lbf @ 150 km/h)

Wind Loading @ Velocity, rear 451.0 N @ 150 km/h (101.4 lbf @ 150 km/h)

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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 2585 mm | 101.772 in
Weight, gross 46.5 kg | 102.515 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/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.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

BSAMNT-3

