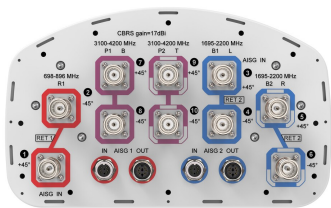


# NHHSS-65A-R2BT4



10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100-4200 MHz, 65° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

- Perfect antenna to add 3.5GHz CBRS to macro sites
- Low band and mid band performance mirrors the performance of existing NHH hex port antennas
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One LB RET and one HB RET. Both high bands are controlled by one RET to ensure same tilt level for 4x MIMO

## 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
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

## Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	4x 8 pin connector as per IEC 60130-9 Daisy chain in: Male / Daisy chain out: Female Pin3: RS485A(AISG_B), Pin5: RS485B(AISG_A), Pin6: DC 10~30V, Pin7: DC_ Return
RET Interface, quantity	2 female   2 male

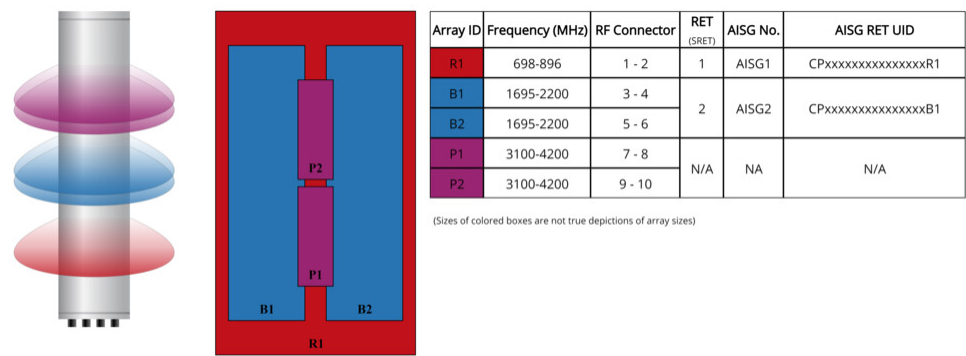
# NHHSS-65A-R2BT4

Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1   Port 3
Internal RET	Low band (1)   Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

## Dimensions

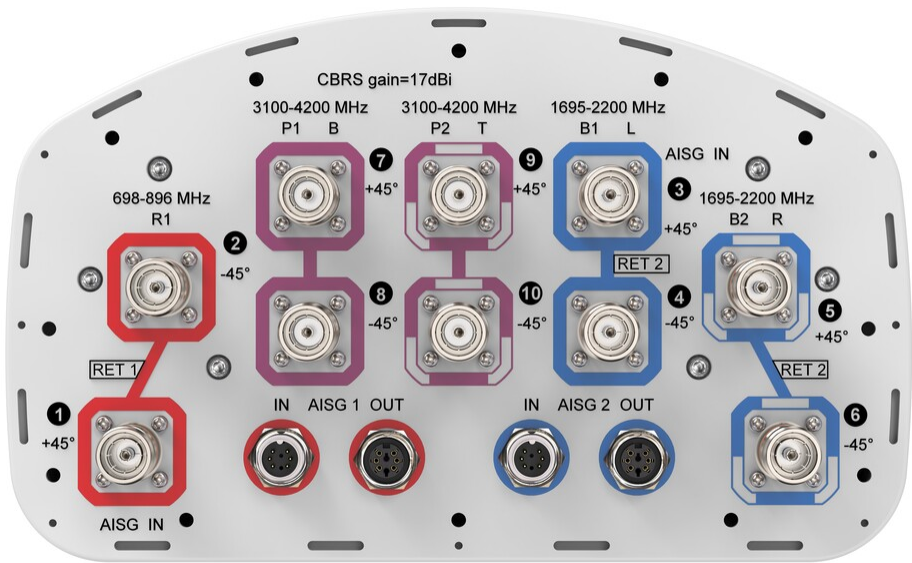
Width	301 mm   11.85 in
Depth	181 mm   7.126 in
Length	1413 mm   55.63 in
Net Weight, antenna only	19.5 kg   42.99 lb

## Array Layout



## Port Configuration

# NHHSS-65A-R2BT4



## Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz   3100 – 4200 MHz   698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

## Electrical Specifications

	R1	R1	B1,B2	B1,B2	B1,B2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	3100–3550	3550–3700	3700–4200
RF Port	1,2	1,2	3,4,5,6	3,4,5,6	3,4,5,6	7,8,9,10	7,8,9,10	7,8,9,10
Gain, dBi	13.8	13.9	16.2	16.7	16.9	16.9	16.5	16.8
Beamwidth, Horizontal, degrees	67	64	69	62	62	56	67	62
Beamwidth, Vertical, degrees	16.2	14.4	7	6.6	6.4	7.5	6.9	6.3
Beam Tilt, degrees	0–18	0–18	0–10	0–10	0–10	4	4	4
USLS (First Lobe), dB	16	16	17	16	17	16	18	17
Front-to-Back Ratio at 180°, dB	29	27	30	28	27	31	32	29
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25

# NHHSS-65A-R2BT4

<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-140	-140	-140
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	300	300	100	100	100

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	206.0 N @ 150 km/h (46.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	169.0 N @ 150 km/h (38.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	396.0 N @ 150 km/h (89.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	208.0 N @ 150 km/h (46.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	380 mm   14.961 in
<b>Depth, packed</b>	295 mm   11.614 in
<b>Length, packed</b>	1537 mm   60.512 in
<b>Weight, gross</b>	30.1 kg   66.359 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## 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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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