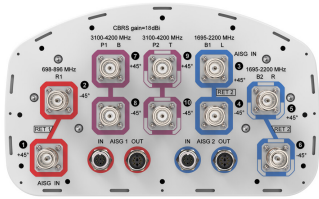


NHHSS-65C-R2BT2



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

OBSOLETE

This product was discontinued on: **March 30, 2023**

Replaced By:

NHHSS-65C-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.

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
Reflector Material	Aluminum
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

NHHSS-65C-R2BT2

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

Input Voltage 10–30 Vdc

Internal Bias Tee Port 1 | Port 3

Internal RET Low band (1)

Power Consumption, active state, maximum 10 W

Power Consumption, idle state, maximum 2 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

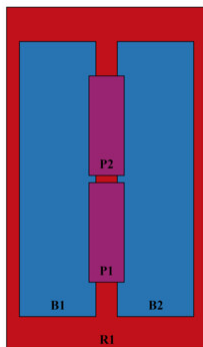
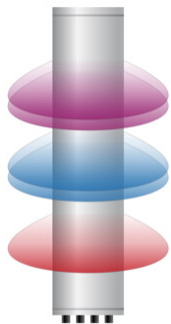
Width 301 mm | 11.85 in

Depth 181 mm | 7.126 in

Length 2438 mm | 95.984 in

Net Weight, without mounting kit 28.1 kg | 61.95 lb

Array Layout

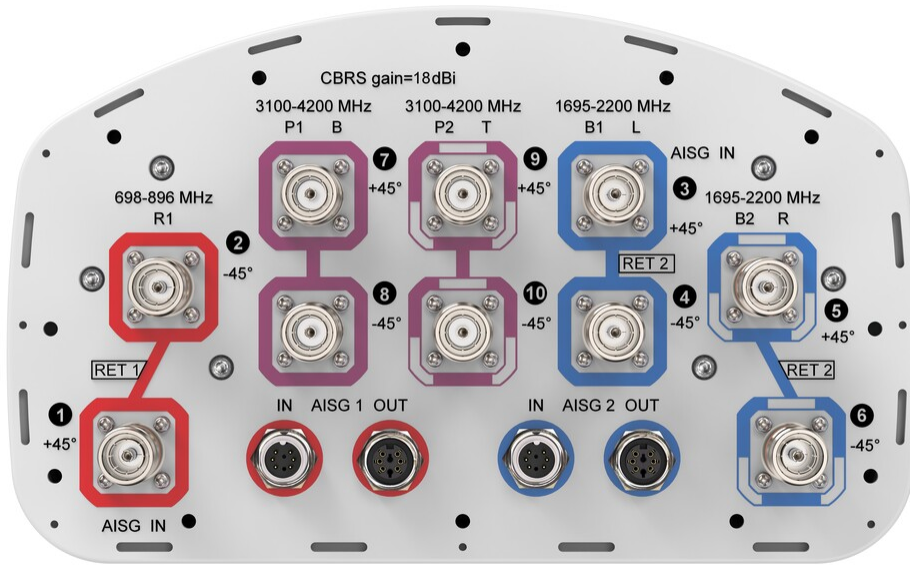


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
B1	1695-2200	3 - 4	2	AISG2	CPxxxxxxxxxxxxxxxxB1
B2	1695-2200	5 - 6			
P1	3100-4200	7 - 8	N/A	NA	N/A
P2	3100-4200	9 - 10			

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

Port Configuration

NHHSS-65C-R2BT2



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

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	3100–3550	3550–3700	3700–4200
Gain, dBi	15.8	16	17.5	17.8	18	17.6	17.2	17.4
Beamwidth, Horizontal, degrees	64	62	67	62	63	60	66	63
Beamwidth, Vertical, degrees	8.9	7.9	5.6	5.2	5	5.6	5.3	4.9
Beam Tilt, degrees	0–11	0–11	0–7	0–7	0–7	2	2	2
USLS (First Lobe), dB	19	19	19	21	23	18	16	17
Front-to-Back Ratio at 180°, dB	28	31	32	31	28	30	32	29
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	30	30	30
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	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-140	-140	-140

NHHSS-65C-R2BT2

Input Power per Port at 50°C, maximum, watts	300	300	300	300	300	100	100	100
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Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	3100–3550	3550–3700	3700–4200
Gain by all Beam Tilts, average, dBi	15.5	15.8	17.1	17.6	17.7	17.2	17	17
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.6	±0.3	±0.3	±0.6	±0.4	±0.5
Gain by Beam Tilt, average, dBi	0° 15.9 5° 15.7 11° 15.3	0° 16.0 5° 16.0 11° 15.5	0° 17.0 3° 17.1 7° 17.0	0° 17.5 3° 17.6 7° 17.6	0° 17.6 3° 17.7 7° 17.6			
Beamwidth, Horizontal Tolerance, degrees	±1.8	±1.4	±5.9	±1.6	±3.9	±11.2	±4.7	±9.3
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.7	±0.3	±0.2	±0.3	±0.4	±0.3	±0.4
USLS, beampeak to 20° above beampeak, dB	14	15	15	16	16	16	16	15
Front-to-Back Total Power at 180° ± 30°, dB	22	25	26	26	24	25	24	22
CPR at Boresight, dB	23	19	18	19	19	17	17	15
CPR at Sector, dB	11	9	10	9	8	9	8	7

Mechanical Specifications

Wind Loading @ Velocity, lateral	330.0 N @ 150 km/h (74.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	757.0 N @ 150 km/h (170.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	398.0 N @ 150 km/h (89.5 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	441 mm 17.362 in
Depth, packed	337 mm 13.268 in
Length, packed	2583 mm 101.693 in
Weight, gross	40.8 kg 89.948 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ROHS	Compliant/Exempted

NHHSS-65C-R2BT2

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