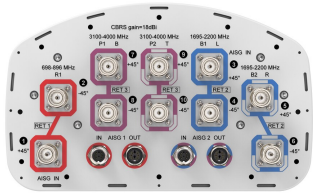


NHHSS-65C-R3B



10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100–4000 MHz, 65° HPBW, 3x RETs and 2x SBTs, active RET on C-Band, 2.4m Length.

- 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 mid band allow remote RET control from the radio over the RF jumper cable
- Both mid bands are controlled by the same RET to ensure same tilt level for 4x MIMO. The high band RET is controlled via the mid band RET bus

OBSOLETE

This product was discontinued on: March 30, 2024

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
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
RF Connector Quantity, total	10

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
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NHHSS-65C-R3B

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 3
Internal RET	High band (1) 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	2438 mm 95.984 in
Net Weight, antenna only	28.1 kg 61.95 lb

Array Layout

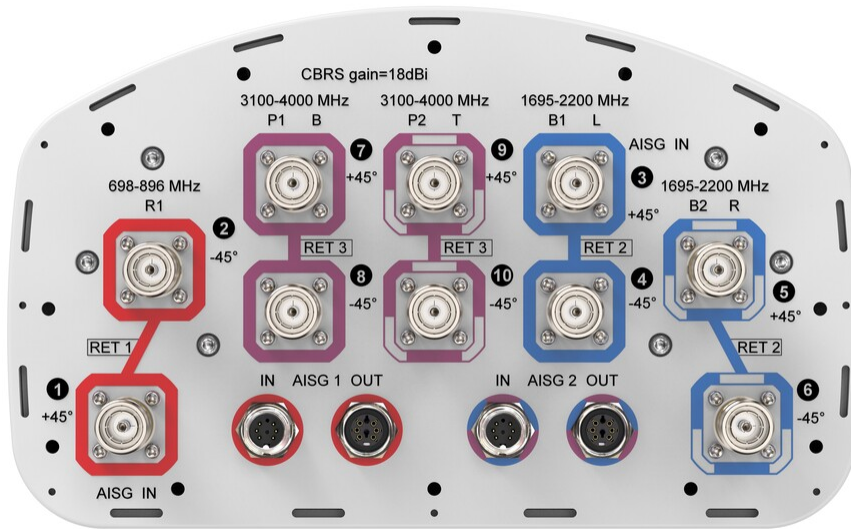
Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	CPxxxxxxxxxxxxxxxxR1
B1	1695-2200	3-4	2	CPxxxxxxxxxxxxxxxxB1
B2	1695-2200	5-6		
P1	3100-4000	7-8	3	CPxxxxxxxxxxxxxxxxP1
P2	3100-4000	9-10		

Left Bottom Right

[Sizes of colored boxes are not true depictions of array sizes]

Port Configuration

NHHSS-65C-R3B



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz 3100 – 4000 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	3700–4000
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	15.8	16	17.5	17.8	18	17.8	17.7	17.5
Beamwidth, Horizontal, degrees	64	62	67	62	63	59	63	62
Beamwidth, Vertical, degrees	8.9	7.9	5.6	5.2	5	5.7	5.3	5.1
Beam Tilt, degrees	0–11	0–11	0–7	0–7	0–7	0–10	0–10	0–10
USLS (First Lobe), dB	19	19	19	21	23	17	18	18
Front-to-Back Ratio at 180°, dB	28	31	32	31	28	30	32	32
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	30	30	30

NHHSS-65C-R3B

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	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	300	300	300	300	300	100	100	100

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	3100–3550	3550–3700	3700–4000
Gain by all Beam Tilts, average, dBi	15.5	15.8	17.1	17.6	17.7	17.3	17.1	17.1
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.6	±0.3	±0.3	±0.6	±0.5	±0.5
Beamwidth, Horizontal Tolerance, degrees	±2	±1	±6	±2	±4	±10	±6	±9
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.7	±0.3	±0.2	±0.3	±0.4	±0.3	±0.3
USLS, beampeak to 20° above beampeak, dB	14	15	15	16	16	15	16	15
Front-to-Back Total Power at 180° ± 30°, dB	22	25	26	26	24	26	24	23
CPR at Boresight, dB	23	19	18	19	19	17	17	15
CPR at Sector, dB	11	9	10	9	8	9	7	6

Mechanical Specifications

Wind Loading @ Velocity, frontal	393.0 N @ 150 km/h (88.3 lbf @ 150 km/h)
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	380 mm 14.961 in
Depth, packed	295 mm 11.614 in
Length, packed	2571 mm 101.221 in
Weight, gross	40.5 kg 89.287 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value

NHHSS-65C-R3B

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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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