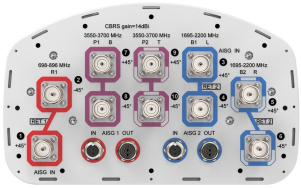
NHHSS-65B-R2BT8-V2



10-port sector antenna 2x 698-896, 4x 1695-2200 and 4x 3550-3700 MHz, 65° HPBW, 2x RETs and 2x SBTs.

- 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
- One LB RET and one MB RET, both Mid 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
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
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

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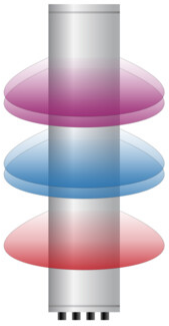
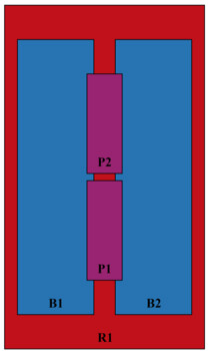
Internal RET	Low band (1) | Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	301 mm | 11.85 in
Depth	181 mm | 7.126 in
Length	1828 mm | 71.969 in
Net Weight, antenna only	21 kg | 46.297 lb

Array Layout



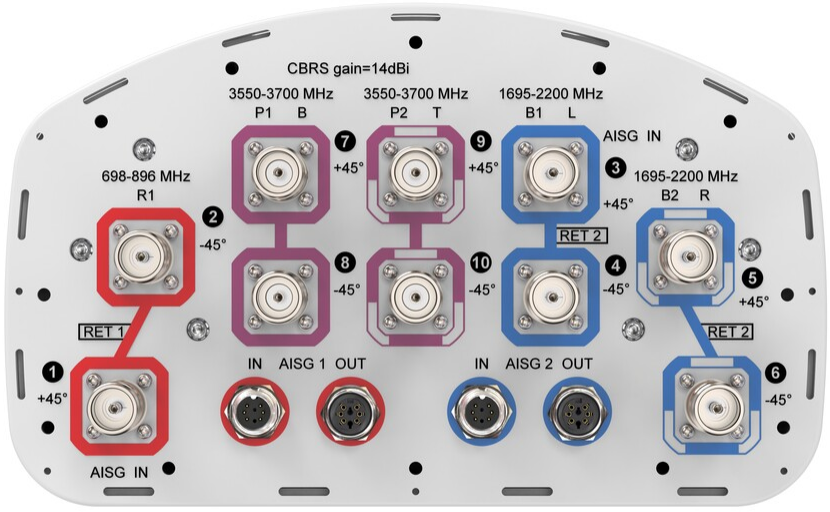


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxR1
B1	1695-2200	3 - 4	65°	2	AISG2	CPxxxxxxxxxxxxxxB1
B2	1695-2200	5 - 6	65°			
P1	3550-3700	7 - 8	65°	N/A	NA	N/A
P2	3550-3700	9 - 10	65°			

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

Port Configuration

NHHSS-65B-R2BT8-V2



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz | 3550 – 3700 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
Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2200**	**3550–3700**
RF Port	1,2	1,2	3-6	3-6	3-6	7-10
Gain, dBi	14.7	14.8	17.4	17.7	17.7	13
Beamwidth, Horizontal, degrees	66	62	66	62	66	57
Beamwidth, Vertical, degrees	13	11.4	5.5	5.2	4.8	18.3
Beam Tilt, degrees	0–14	0–14	0–7	0–7	0–7	8
USLS (First Lobe), dB	17	16	15	15	15	14
Front-to-Back Ratio at 180°, dB	28	27	28	27	25	26
Isolation, Cross Polarization, dB	25	25	25	25	25	25

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Isolation, Inter-band, dB	25	25	25	25	25	25
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	100

Mechanical Specifications

Wind Loading @ Velocity, frontal	278.0 N @ 150 km/h (62.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	230.0 N @ 150 km/h (51.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	537.0 N @ 150 km/h (120.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	282.0 N @ 150 km/h (63.4 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	1956 mm | 77.008 in
Weight, gross	32.3 kg | 71.209 lb

Regulatory Compliance/Certifications

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

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance