

10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100-4200 MHz, 65° HPBW, 2x RETs and 2x SBTs. Both high bandsshare 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-65B-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 TypeRF connector inner conductor and body grounded to reflector and mounting

bracket

Performance Note Outdoor usage

Radome MaterialFiberglass, UV resistantRadiator MaterialLow 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 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 RET High band (1) | 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

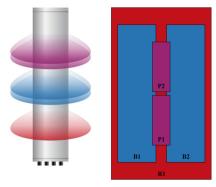
 Width
 301 mm | 11.85 in

 Depth
 181 mm | 7.126 in

 Length
 1828 mm | 71.969 in

 Net Weight, without mounting kit
 23.1 kg | 50.927 lb

Array Layout

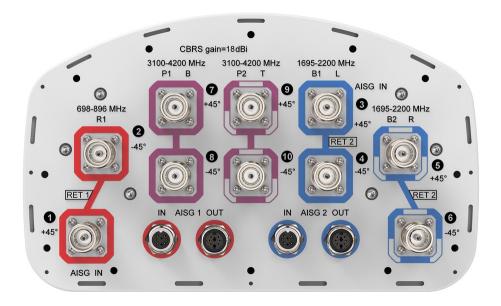


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID		
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxxR1		
B1	1695-2200	3 - 4	2	AISG2	CPxxxxxxxxxxxxxxxxxB1		
B2	1695-2200	5 - 6	2				
P1	3100-4200	7 - 8		NA	N/A		
P2	3100-4200	9 - 10	N/A				

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

Port Configuration





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	1695-188	0 1850-199	0 1920-220	0 3100-355	0 3550-370	0 3700-4200
Gain, dBi	14.8	15.2	17.4	17.8	18	17.5	17.3	17.6
Beamwidth, Horizontal, degrees	65	62	66	61	64	55	65	61
Beamwidth, Vertical, degrees	13	11.6	5.5	5.2	4.9	5.7	5.4	4.9
Beam Tilt, degrees	0-14	0-14	0-7	0-7	0-7	2	2	2
USLS (First Lobe), dB	15	15	16	18	18	17	17	17
Front-to-Back Ratio at 180°, dB	26	29	31	28	27	30	32	29
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	28	28	28
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

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Input Power per Port at 50°C, 300 300 300 300 100 100 100

maximum, watts

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 287.0 N @ 150 km/h (64.5 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

 Width, packed
 1973 mm | 77.677 in

 Depth, packed
 441 mm | 17.362 in

 Length, packed
 337 mm | 13.268 in

 Weight, gross
 35.1 kg | 77.382 lb

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Above maximum concentration value

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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

