

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
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- 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-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.

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

Radome Material Fiberglass, UV resistant

Radiator Material Aluminum | Low loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector LocationBottom

RF Connector Quantity, high band 4

RF Connector Quantity, mid band

RF Connector Quantity, low band 2

RF Connector Quantity, total 10

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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 Voltage10-30 VdcInternal RETLow band (1)

Power Consumption, active state, maximum10 WPower Consumption, idle state, maximum2 WPower Consumption, normal conditions, maximum10 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

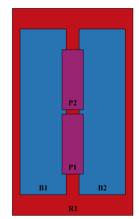
 Width
 301 mm | 11.85 in

 Depth
 181 mm | 7.126 in

 Length
 1413 mm | 55.63 in

 Net Weight, without mounting kit
 17.9 kg | 39.463 lb

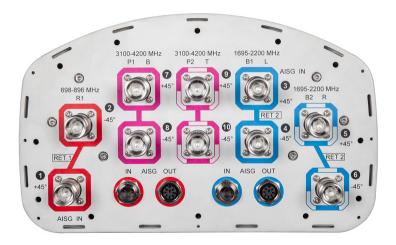
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID		
R1	698-896	1 - 2	1	CPxxxxxxxxxxxxxxxR1		
B1	1695-2200	3 - 4	_	CD		
B2	1695-2200	5 - 6	2	CPxxxxxxxxxxxxxxB1		
P1	3100-4200	7 - 8	N1/A	N1/A		
P2	3100-4200	9 - 10	N/A	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	13.9	14.1	16.4	16.8	17	16.5	16.4	16.8
Beamwidth, Horizontal, degrees	67	64	66	62	63	54	64	58
Beamwidth, Vertical, degrees	16.3	14.6	6.9	6.5	6.3	7.5	7	6.2
Beam Tilt, degrees	0-18	0-18	0-10	0-10	0-10	4	4	4
USLS (First Lobe), dB	17	15	16	16	17	16	19	17
Front-to-Back Ratio at 180°, dB	27	29	30	30	30	30	31	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
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

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PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-140	-140	-140
Input Power per Port at 50°C,	300	300	300	300	300	100	100	100
maximum, watts								

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 206.0 N @ 150 km/h (46.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 169.0 N @ 150 km/h (38.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 208.0 N @ 150 km/h (46.8 lbf @ 150 km/h)

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

Environmental Specifications

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

Packaging and Weights

 Width, packed
 441 mm | 17.362 in

 Depth, packed
 295 mm | 11.614 in

 Length, packed
 1537 mm | 60.512 in

 Weight, gross
 30.1 kg | 66.359 lb

Regulatory Compliance/Certifications

Agency Classification

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 www.commscope.com/ProductCompliance

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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