

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 Type**RF 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** 

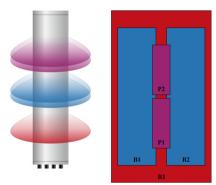
 Width
 301 mm | 11.85 in

 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

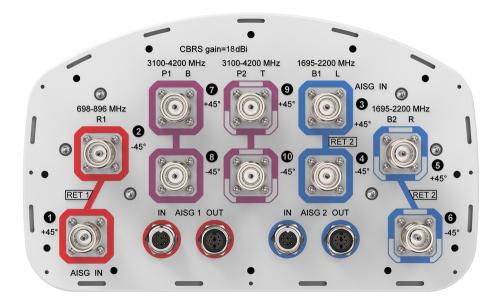


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID		
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1		
B1	1695-2200	3 - 4	_	AISG2	CPxxxxxxxxxxxxxxxB1		
B2	1695-2200	5 - 6	2		CPXXXXXXXXXXXXXXX		
P1	3100-4200	7 - 8		NA	N/A		
P2	3100-4200	9 - 10	N/A		N/A		

(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	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
CPR at Boresight, dB	24	17	16	21	19	15	16	14
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

Page 3 of 4



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
 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

