

8-port sector antenna, 2x 698–798, 2x 824-894 and 4x 1695–2360 MHz, 45° HPBW, low bands each have a RET and the high bands share a RET. Two internal SBTs.

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput

This product will be discontinued on: December 31, 2025 Replaced By:

NNHH-65C-R4 8-port sector antenna, 4x 698-896 and 4x 1695-2360 MHz, 65° HPBW, 4x RETs

## General Specifications

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

**Grounding Type**RF connector body grounded to reflector and mounting bracket

Performance Note Outdoor usage | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

**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

RF Connector Quantity, mid band

RF Connector Quantity, low band 4

RF Connector Quantity, total 8



#### Remote Electrical Tilt (RET) Information

**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 5

Internal RET High band (1) | Low band (2)

Power Consumption, idle state, maximum  $1~\mathrm{W}$  Power Consumption, normal conditions, maximum  $8~\mathrm{W}$ 

Protocol 3GPP/AISG 2.0 (Single RET)

**Dimensions** 

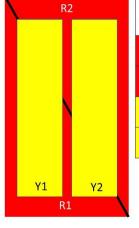
 Width
 457 mm | 17.992 in

 Depth
 178 mm | 7.008 in

 Length
 2437 mm | 95.945 in

 Net Weight, without mounting kit
 48.2 kg | 106.263 lb

### Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID	
R1	698-798	1-2	1	ANxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	
R2	824-894	3-4	2	ANxxxxxxxxxxxxxx2	
Y1	1695-2360	5-6	3	ANi-naganaganaganaga 2	
Y2	1695-2360	7-8		ANxxxxxxxxxxxx3	

Left Right
Bottom

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

## Port Configuration





## **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2360 MHz | 698 – 798 MHz | 824 – 894 MHz

Polarization ±45°

**Total Input Power, maximum** 800 W @ 50 °C

## **Electrical Specifications**

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Frequency Band, MHz	698-798	824-894	1695-1880	1850-1990	1920-2200	2300-2360
Gain, dBi	17.7	18.2	19.5	20	20.5	20.8
Beamwidth, Horizontal, degrees	48	43	44	42.6	42	38
Beamwidth, Vertical, degrees	9.1	8.2	5.8	5.4	5	4.5
Beam Tilt, degrees	0-10	0-10	0-8	0-8	0-8	0-8
USLS (First Lobe), dB	17	20	17	18	18	18
Front-to-Back Ratio at 180°, dB	35	35	36	37	39	40
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	28	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

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PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port,	200	200	300	300	300	250
maximum, watts						

0°-10°

#### Mechanical Specifications

**Mechanical Tilt Range** 

Effective Projective Area (EPA), frontal $1.4 \text{ m}^2 \mid 15.069 \text{ ft}^2$ Effective Projective Area (EPA), lateral $0.3 \text{ m}^2 \mid 3.229 \text{ ft}^2$ 

 Wind Loading @ Velocity, frontal
 1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 315.0 N @ 150 km/h (70.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 1,304.0 N @ 150 km/h (293.2 lbf @ 150 km/h)

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

## Packaging and Weights

 Width, packed
 526 mm | 20.709 in

 Depth, packed
 283 mm | 11.142 in

 Length, packed
 2604 mm | 102.52 in

 Weight, gross
 67.2 kg | 148.15 lb

## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
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.

BSAMNT-M – Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round

members. Kit contains one scissor bracket set.

#### \* Footnotes



**Performance Note** 

Severe environmental conditions may degrade optimum performance

