

NHH-45B-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One LB RET and one HB RET. Both high bands are controlled by one RET to ensure same tilt level for 4x Rx or 4x MIMO

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	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

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 3
Internal RET	High band (1) Low band (1)

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Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	457 mm 17.992 in
Depth	178 mm 7.008 in
Length	1829 mm 72.008 in
Net Weight, antenna only	33.4 kg 73.634 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANxxxxxxxxxxxxxxxx1
Y1	1695-2360	3-4	2	ANxxxxxxxxxxxxxxxx2
Y2	1695-2360	5-6		

Left

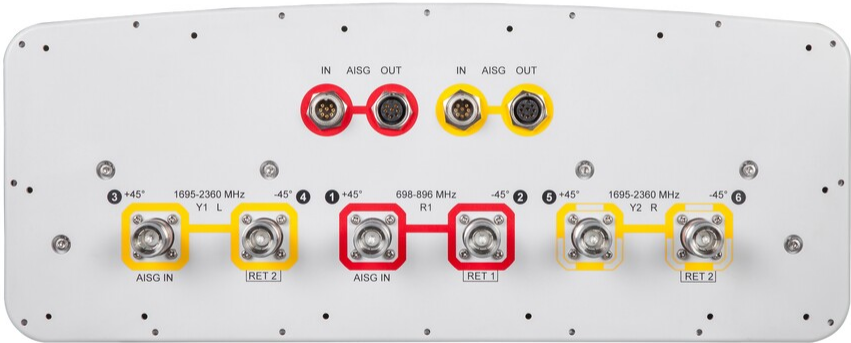
Right

Bottom

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

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	800 W @ 50 °C

Electrical Specifications

	R1	R1	Y1-Y2	Y1-Y2	Y1-Y2	Y1-Y2
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
RF Port	1-2	1-2	3-6	3-6	3-6	3-6
Beamwidth, Horizontal, degrees	48	43	45	43	41	39
Beamwidth, Vertical, degrees	12.5	11.4	5.8	5.4	5	4.5
Beam Tilt, degrees	2–14	2–14	0–8	0–8	0–8	0–8
USLS (First Lobe), dB	19	22	18	18	18	17
Front-to-Back Ratio at 180°, dB	34	39	37	38	40	38
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	28	28	28	28

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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	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	300	300	250

Mechanical Specifications

Effective Projective Area (EPA), frontal	1 m ² 10.764 ft ²
Effective Projective Area (EPA), lateral	0.21 m ² 2.26 ft ²
Wind Loading @ Velocity, frontal	1,065.0 N @ 150 km/h (239.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	220.0 N @ 150 km/h (49.5 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,065.0 N @ 150 km/h (239.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	935.0 N @ 150 km/h (210.2 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	1996 mm 78.583 in
Weight, gross	51.3 kg 113.097 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.
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
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