

# NHH-45C-HG-R2B



6-port Next Generation PerforMax™ sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 2x RETs and 2x SBTs

- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Antenna optimized for higher gain with superior radiation efficiency
- Designed to reduce SUB 1 alarm triggers with pattern consistency between low band and mid band
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Interleaved dipole technology results into an attractive, low wind load mechanical package
- Internal SBTs allow remote RET control from the radio over the RF jumper cable
- Best in class PIM immunity

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

## Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
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


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Internal RET	Low band (1)   Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

## Dimensions

Width	457 mm   17.992 in
Depth	178 mm   7.008 in
Length	2437 mm   95.945 in
Net Weight, without mounting kit	36 kg   79.366 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2360	3 - 4	2	AISG2	3	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2360	5 - 6					

(Color 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	3,4,5,6	3,4,5,6	3,4,5,6	3,4,5,6
Gain, Maximum, dBi	18.7	18.9	20.3	20.6	20.9	20.8
Gain, dBi	18.4	18.7	20.2	20.4	20.3	20.1
Beamwidth, Horizontal, degrees	45	41	45	44	42	36
Beamwidth, Vertical, degrees	9.2	8.3	5.2	4.9	4.6	4.3
Beam Tilt, degrees	0–10	0–10	0–8	0–8	0–8	0–8
USLS (First Lobe), dB	15	18	15	16	16	15
Front-to-Back Ratio at 180°, dB	30	35	38	38	37	38
CPR at Boresight, dB	17	15	19	24	19	17
Isolation, Cross Polarization, dB	25	25	25	25	25	25

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Isolation, Inter-band, dB	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
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	250	250	250	200

## Mechanical Specifications

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	55 kg   121.254 lb

## Regulatory Compliance/Certifications

Agency	Classification
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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