

NHH-45A-HG-R2B



6-port Next Generation PerforMax™ sector antenna, 2x 698–896 and 4x 1695–2200 MHz, 45° HPBW, 2x RETs and 2x SBTs

- Internal SBTs allow remote RET control from the radio over the RF jumper cable
- Antenna optimized for higher gain with superior radiation efficiency
- Interleaved dipole technology results into an attractive, low wind load mechanical package
- Powered by Andrew’s SEED® technology (Sustainable Energy Efficient Design)
- 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
- Best in class PIM immunity

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	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

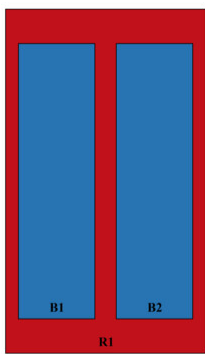
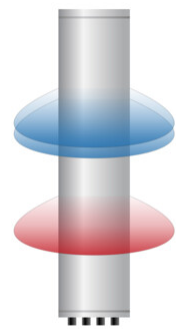
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Internal RET	Low band (1) Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	457 mm 17.992 in
Depth	178 mm 7.008 in
Length	1399 mm 55.079 in

Array Layout

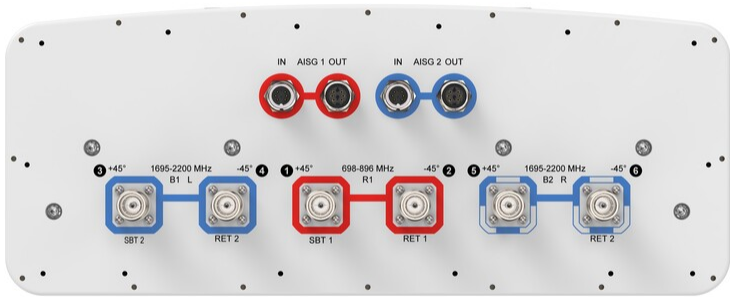


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxR1
B1	1695-2200	3 - 4	2	AISG2	3	2	CPxxxxxxxxxxxxB1
B2	1695-2200	5 - 6					

(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 – 2200 MHz 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	800 W @ 50 °C

Electrical Specifications

	R1	R1	B1-B2	B1-B2	B1-B2
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200
RF Port	1-2	1-2	3-6	3-6	3-6
Gain, dBi	15.7	16.4	19.2	19.8	20.1
Beamwidth, Horizontal, degrees	47	42	43	42	40
Beamwidth, Vertical, degrees	18.6	16.1	6.5	6.1	5.8
Beam Tilt, degrees	2–18	2–18	1–9	1–9	1–9
USLS (First Lobe), dB	16	17	15	17	18
Front-to-Back Ratio at 180°, dB	27	33	33	35	35
CPR at Boresight, dB	18	23	19	21	19

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Isolation, Cross Polarization, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250

Mechanical Specifications

Wind Loading @ Velocity, frontal	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	159.0 N @ 150 km/h (35.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	692.0 N @ 150 km/h (155.6 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	1566 mm 61.654 in
Weight, gross	37.4 kg 82.453 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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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