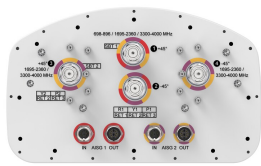


# NHHSS-65B-HGT-R3B



4-port Next Generation PerforMax™ sector antenna, 2x 698–896, 4x 1695–2360 and 4x 3300–4000 MHz, 65° HPBW, 3x RETs and 2x SBTs.

- Antenna optimized for higher gain with superior radiation efficiency
- Powered by Andrew’s SEED® technology (Sustainable Energy Efficient Design)
- Designed to reduce SUB 1 alarm triggers with pattern consistency between low band, mid band and high band
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Best in class PIM immunity
- 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
- Ideal for deploying low band, mid-band and CBRS/C-Band in flagpoles and concealment solutions
- Internal multiplexing reduces cable count from 10 cables to 4 cables per antenna, saving space on flag poles and reducing wind load on other applications

## 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	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, total	4

## 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

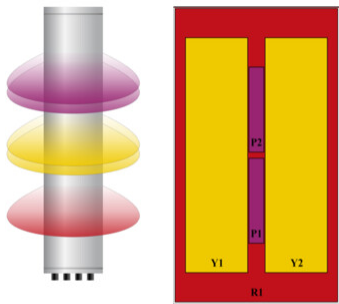
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Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1   Port 3
Internal RET	High band (1)   Low band (1)   Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

## Dimensions

Width	301 mm   11.85 in
Depth	181 mm   7.126 in
Length	1978 mm   77.874 in
Net Weight, antenna only	27.2 kg   59.966 lb

## Array Layout

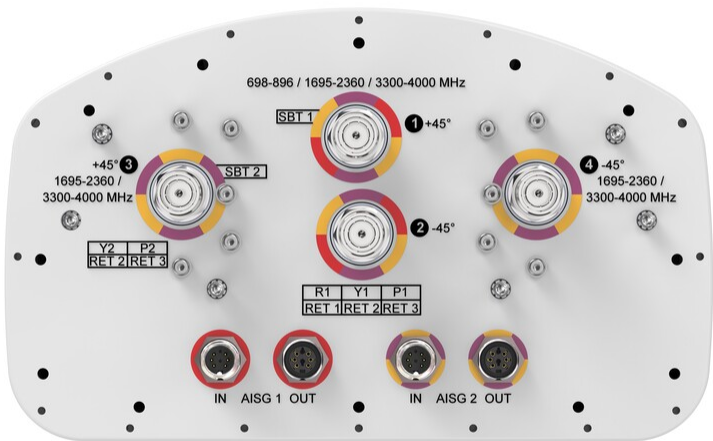


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	ANxxxxxxxxxxxxR1
Y1	1695-2360	1 - 2	2	AISG2	3	2	ANxxxxxxxxxxxxY1
Y2	1695-2360	3 - 4					
P1	3300-4000	1 - 2	3	AISG2	3	2	ANxxxxxxxxxxxxP1
P2	3300-4000	3 - 4					

(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   3300 – 4000 MHz   698 – 896 MHz
Polarization	±45°

## Electrical Specifications

	R1	R1	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360	3300–3550	3550–3700	3700–4000
RF Port	1-2	1-2	1-4	1-4	1-4	1-4	1-4	1-4	1-4
Gain, dBi	14.8	14.7	17.9	18.1	18	17.7	17.6	17.4	17.6
Beamwidth, Horizontal, degrees	66	62	64	62	64	68	50	53	45
Beamwidth, Vertical, degrees	13.1	11.4	5.5	5	4.8	4.5	5.7	5.5	5.2
Beam Tilt, degrees	0–14	0–14	0–7	0–7	0–7	0–7	0–10	0–10	0–10
USLS (First Lobe), dB	16	15	16	16	17	16	16	18	18
Front-to-Back Ratio at	28	31	32	32	28	28	28	34	30

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180°, dB									
CPR at Boresight, dB	25	18	23	25	23	23	14	15	14
Isolation, Inter-band, dB	25	25	25	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	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	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	250	250	150	150	150	150	150	150	150

## Mechanical Specifications

Wind Loading @ Velocity, frontal	306.0 N @ 150 km/h (68.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	254.0 N @ 150 km/h (57.1 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	590.0 N @ 150 km/h (132.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	311.0 N @ 150 km/h (69.9 lbf @ 150 km/h)
Wind Speed, maximum	241.4 km/h (150 mph)

## Packaging and Weights

Width, packed	380 mm   14.961 in
Depth, packed	295 mm   11.614 in
Length, packed	2110 mm   83.071 in
Weight, gross	38.3 kg   84.437 lb

## Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

## Included Products

BSAMNT-4	–	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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