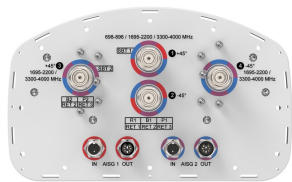


# NHHSS-65C-HGT-R3B



4-port Next Generation PerforMax™ sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3300–4000 MHz, 65° HPBW, 3x RETs and 2x SBTs

- 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
- Ideal for deploying low band, mid band and CBRS/C-Band in flagpoles and concealment solutions
- Antenna optimized for higher gain with superior radiation efficiency
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBTs allow remote RET control from the radio over the RF jumper cable
- 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

## 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
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
Input Voltage	10–30 Vdc

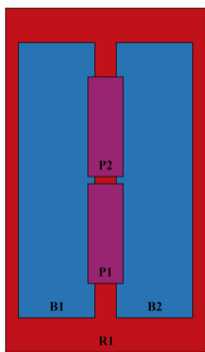
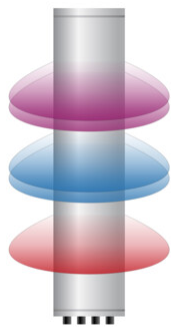
# NHHSS-65C-HGT-R3B

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 (Single RET)

## Dimensions

Width	301 mm   11.85 in
Depth	181 mm   7.126 in
Length	2588 mm   101.89 in
Net Weight, antenna only	31.5 kg   69.446 lb

## Array Layout

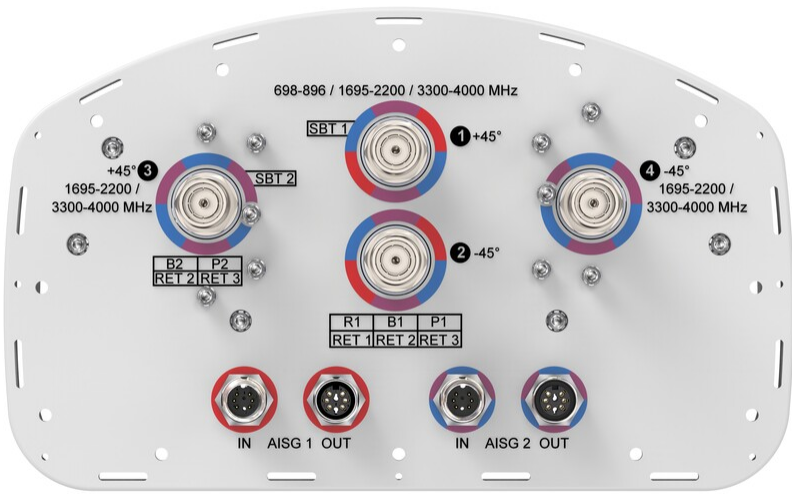


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxR1
B1	1695-2200	1 - 2	2	AISG2	3	2	CPxxxxxxxxxxxxxxB1
B2	1695-2200	3 - 4					
P1	3300-4000	1 - 2	3	AISG2	3	2	CPxxxxxxxxxxxxxxP1
P2	3300-4000	3 - 4					

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

## Port Configuration

# NHHSS-65C-HGT-R3B



## Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz   3300 – 4000 MHz   698 – 896 MHz
Polarization	±45°

## Electrical Specifications

	R1	R1	B1,B2	B1,B2	B1,B2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	698–798	824–896	1695–1880	1850–1990	1920–2200	3300–3550	3550–3700	3700–4000
RF Port	1-2	1-2	1-4	1-4	1-4	1-4	1-4	1-4
Gain, dBi	16.1	16	18.3	18.5	18.5	17.9	17.5	17.8
Beamwidth, Horizontal, degrees	69	64	64	61	63	56	60	52
Beamwidth, Vertical, degrees	8.7	7.6	5.2	5	4.8	5.6	5.3	5.2
Beam Tilt, degrees	0–11	0–11	0–7	0–7	0–7	0–10	0–10	0–10
USLS (First Lobe), dB	16	15	16	16	17	17	17	18
Front-to-Back Ratio at 180°, dB	29	34	34	35	30	31	31	30
CPR at Boresight, dB	24	18	24	23	24	17	17	16
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25

# NHHSS-65C-HGT-R3B

<b>VSWR   Return loss, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-145	-145	-145
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	150	150	150	150	150	150

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	422.0 N @ 150 km/h (94.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	356.0 N @ 150 km/h (80.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	813.0 N @ 150 km/h (182.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	428.0 N @ 150 km/h (96.2 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	380 mm   14.961 in
<b>Depth, packed</b>	295 mm   11.614 in
<b>Length, packed</b>	2720 mm   107.087 in
<b>Weight, gross</b>	43.5 kg   95.901 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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