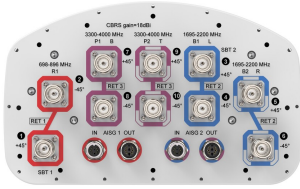


# NHHSS-65C-HG-R3B



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

- Designed to reduce SUB 1 alarm triggers with pattern consistency between low band and mid band
- Enhanced interference mitigation for improved SINR and throughput
- 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
- Antenna optimized for higher gain with improved radiation efficiency
- Powered by CommScope's next generation high-efficiency SEED™ technology

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	4
<b>RF Connector Quantity, mid band</b>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	10

## Remote Electrical Tilt (RET) Information

<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1   Port 3

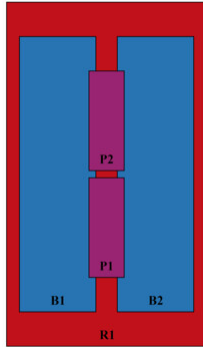
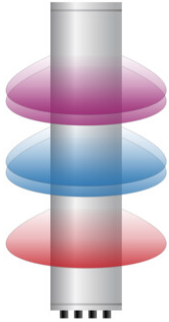
# NHHSS-65C-HG-R3B

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

## Dimensions

<b>Width</b>	301 mm   11.85 in
<b>Depth</b>	181 mm   7.126 in
<b>Length</b>	2438 mm   95.984 in
<b>Net Weight, antenna only</b>	30 kg   66.139 lb

## Array Layout

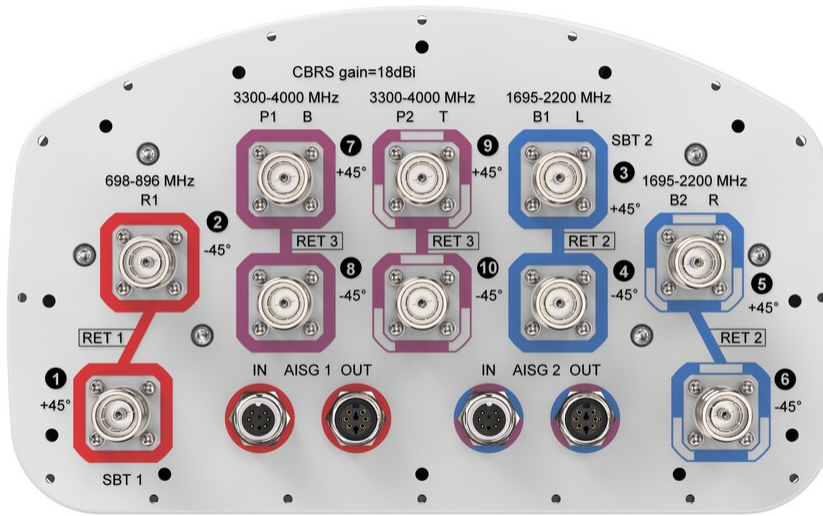


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxxR1
B1	1695-2200	3 - 4	2	AISG2	3	2	CPxxxxxxxxxxxxxxxxB1
B2	1695-2200	5 - 6					
P1	3300-4000	7 - 8	3	AISG2	3	2	CPxxxxxxxxxxxxxxxxP1
P2	3300-4000	9 - 10					

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

## Port Configuration

# NHHSS-65C-HG-R3B



## Electrical Specifications

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

## Electrical Specifications

	R1	R1	B1,B2	B1,B2	B1,B2	P1,P2	P1,P2	P1,P2
<b>Frequency Band, MHz</b>	<b>698–798</b>	<b>824–896</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>3300–3550</b>	<b>3550–3700</b>	<b>3700–4000</b>
<b>RF Port</b>	1,2	1,2	3,4,5,6	3,4,5,6	3,4,5,6	7,8,9,10	7,8,9,10	7,8,9,10
<b>Gain, dBi</b>	16.5	16.5	18.5	18.9	19.1	18	18.1	18.3
<b>Beamwidth, Horizontal, degrees</b>	67	63	64	61	62	55	60	56
<b>Beamwidth, Vertical, degrees</b>	8.6	7.6	5.1	4.8	4.7	5.6	5.1	5
<b>Beam Tilt, degrees</b>	0–11	0–11	0–7	0–7	0–7	0–10	0–10	0–10
<b>USLS (First Lobe), dB</b>	16	15	17	18	18	18	19	20
<b>Front-to-Back Ratio at 180°, dB</b>	30	32	33	35	30	34	30	29
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25

# NHHSS-65C-HG-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>	300	300	250	250	250	100	100	100

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698-798</b>	<b>824-896</b>	<b>1695-1880</b>	<b>1850-1990</b>	<b>1920-2200</b>	<b>3300-3550</b>	<b>3550-3700</b>	<b>3700-4000</b>
<b>CPR at Boresight, dB</b>	24	21	24	25	25	17	16	15

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	393.0 N @ 150 km/h (88.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	330.0 N @ 150 km/h (74.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	757.0 N @ 150 km/h (170.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	398.0 N @ 150 km/h (89.5 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>	2571 mm   101.221 in
<b>Weight, gross</b>	42.5 kg   93.696 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

## 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.

## \* Footnotes

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