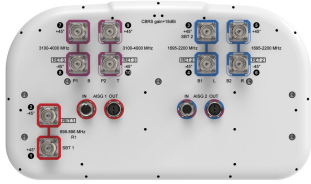


# NHHSS-55C-HG-R3B



10-port Next Generation High Performance Sector Antenna, 2x 698–896, 4x 1695–2200 and 4x 3100–4000 MHz, 55° HPBW, 3x RETs.

- 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 inner conductor and 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

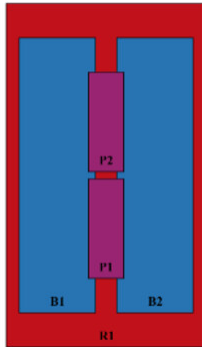
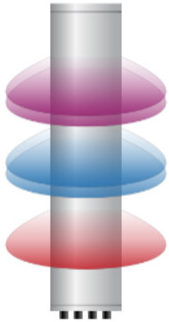
# NHHSS-55C-HG-R3B

<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>	395 mm   15.551 in
<b>Depth</b>	228 mm   8.976 in
<b>Length</b>	2438 mm   95.984 in
<b>Net Weight, antenna only</b>	36 kg   79.366 lb

## Array Layout

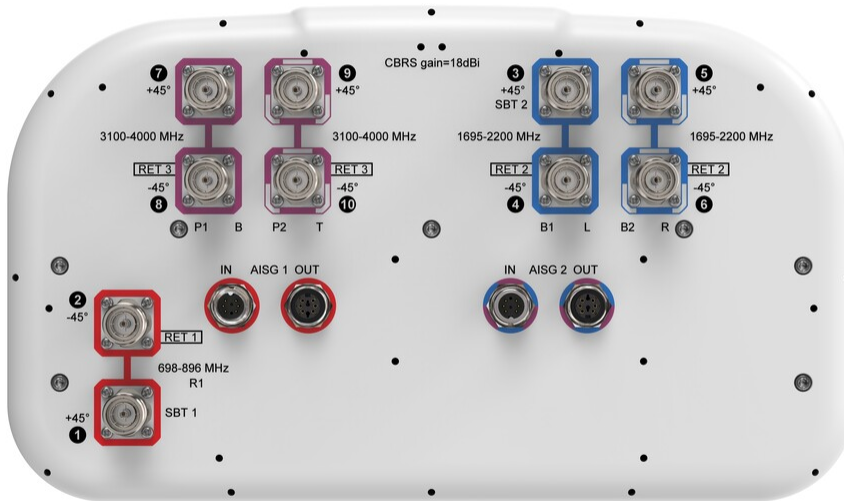


Array ID	Frequency (MHz)	RF Connector	RET (S-RET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxxR1
B1	1695-2200	3 - 4	2	AISG2	3	2	CPxxxxxxxxxxxxxxxxB1
B2	1695-2200	5 - 6					
P1	3100-4000	7 - 8	3	AISG2	3	2	CPxxxxxxxxxxxxxxxxP1
P2	3100-4000	9 - 10					

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

## Port Configuration

# NHHSS-55C-HG-R3B



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2200 MHz   3100 – 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>698–806</b>	<b>806–896</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>3100–3550</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>	17.2	17.1	18.9	19.2	19.3	16.9	17.1	17.2
<b>Beamwidth, Horizontal, degrees</b>	58	56	58	58	57	65	55	54
<b>Beamwidth, Vertical, degrees</b>	8.8	7.8	5.1	4.8	4.7	5.9	5.4	5.2
<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	17	16	16	16	15	16	16
<b>Front-to-Back Ratio at 180°, dB</b>	27	30	27	28	30	30	29	28

# NHHSS-55C-HG-R3B

<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25
<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

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	382.0 N @ 150 km/h (85.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	346.0 N @ 150 km/h (77.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	768.0 N @ 150 km/h (172.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	437.0 N @ 150 km/h (98.2 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	505 mm   19.882 in
<b>Depth, packed</b>	386 mm   15.197 in
<b>Length, packed</b>	2570 mm   101.181 in
<b>Weight, gross</b>	51.5 kg   113.538 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.
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## \* Footnotes

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