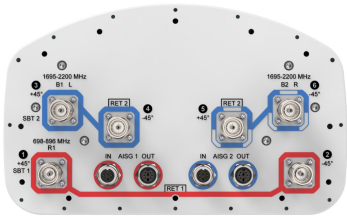


# NHH-65C-HG-R2B



6-port Next Generation High Performance sector antenna, 2x 698–896 and 4x 1695–2200 MHz, 65° HPBW, 2x RET

- Antenna optimized for higher gain with improved radiation efficiency
- 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
- 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>	Copper   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, mid band</b>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	6

## 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
<b>Internal RET</b>	Low band (1)   Mid band (1)
<b>Power Consumption, active state, maximum</b>	10 W

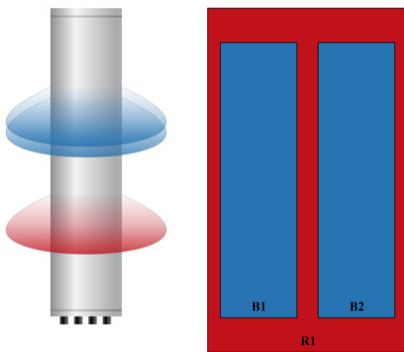
# NHH-65C-HG-R2B

**Power Consumption, idle state, maximum** 2 W  
**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

**Width** 301 mm | 11.85 in  
**Depth** 180 mm | 7.087 in  
**Length** 2438 mm | 95.984 in  
**Net Weight, antenna only** 24.4 kg | 53.793 lb

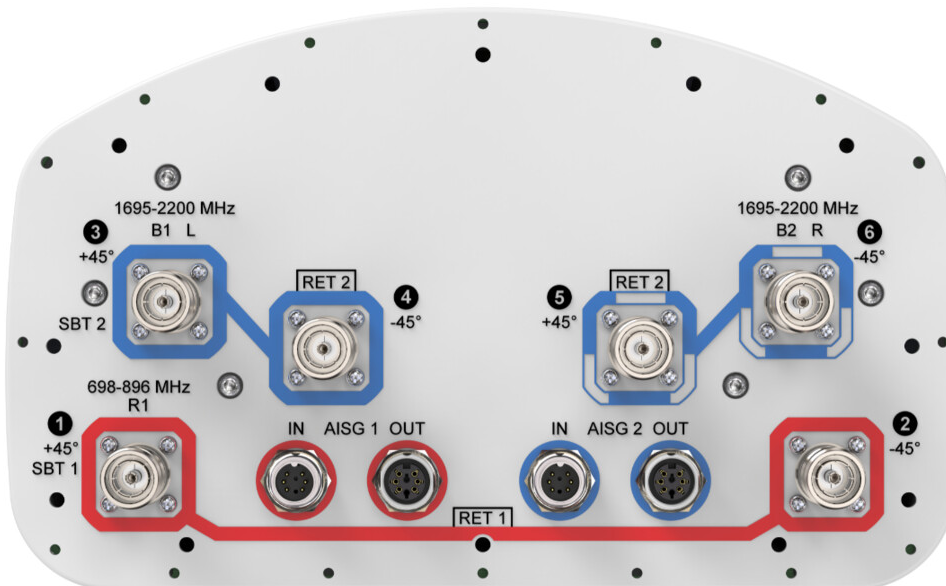
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT No.	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					

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

## Port Configuration



# NHH-65C-HG-R2B

## Electrical Specifications

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

## Electrical Specifications

	<b>R1</b>	<b>R1</b>	<b>B1,B2</b>	<b>B1,B2</b>	<b>B1,B2</b>
<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>RF Port</b>	1,2	1,2	3,4,5,6	3,4,5,6	3,4,5,6
<b>Gain, dBi</b>	17	17.3	19.1	19.3	19.8
<b>Beamwidth, Horizontal, degrees</b>	65	60	66	65	63
<b>Beamwidth, Vertical, degrees</b>	8.7	7.7	5.2	4.9	4.7
<b>Beam Tilt, degrees</b>	0–11	0–11	0–7	0–7	0–7
<b>USLS (First Lobe), dB</b>	16	16	17	18	18
<b>Front-to-Back Ratio at 180°, dB</b>	30	31	37	35	37
<b>Isolation, Cross Polarization, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	250	250	250

## 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>CPR at Boresight, dB</b>	17	14	17	18	19

## 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

# NHH-65C-HG-R2B

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<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>	36.8 kg   81.13 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## 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

**Performance Note** Severe environmental conditions may degrade optimum performance