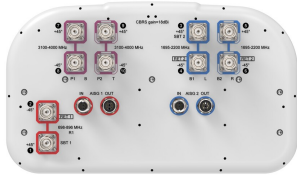


# NHHSS-55C-R2BT4



10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100–4000 MHz, 55° HPBW, 2x RETs.

- Utilizes Pattern Shaping Technology to reduce cell overlap and maximize SINR (Signal to Interference and Noise Ratio)
- Superior SPR (Sector Power Ratio) for best-in-class data throughput rates
- Excellent pattern overlay across all bands
- Low band and mid band performance mirrors performance of the equivalent hex port antenna
- Internal SBTs on low and mid band allow remote RET control from the radio over the RF jumper cable
- One LB RET and one MB RET. Both mid band arrays are controlled by one RET to ensure same tilt level for best 4x4 MIMO performance
- Use optional BSAMNT-SBS-2-2 for side-by-side mounting of two hex and/or ten port 55° antennas

## 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>	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, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc

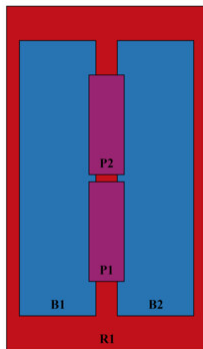
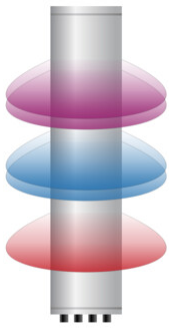
# NHHSS-55C-R2BT4

<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
<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>	35.4 kg   78.044 lb

## Array Layout

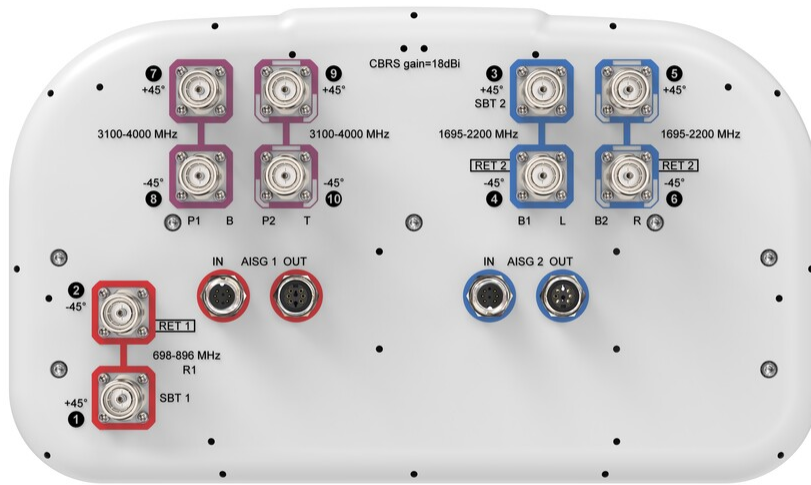


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPXXXXXXXXXXXXXXXXR1
B1	1695-2200	3 - 4	2	AISG2	3	2	CPXXXXXXXXXXXXXXXXB1
B2	1695-2200	5 - 6					
P1	3100-4000	7 - 8	N/A	NA			N/A
P2	3100-4000	9 - 10					

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

## Port Configuration

# NHHSS-55C-R2BT4



## 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°
<b>Total Input Power, maximum</b>	1,000 W @ 50 °C

## 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>	16.2	16.1	18	18.2	18.5	17.7	17.6	17.4
<b>Beamwidth, Horizontal, degrees</b>	57	54	56	59	57	56	62	52
<b>Beamwidth, Vertical, degrees</b>	9.3	8.1	5.6	5.2	4.8	5.9	5.3	5.2
<b>Beam Tilt, degrees</b>	0–11	0–11	0–7	0–7	0–7	4	4	4
<b>USLS (First Lobe), dB</b>	15	16	18	19	19	19	21	15
<b>Front-to-Back Ratio at 180°, dB</b>	26	30	31	33	31	29	26	24
<b>Isolation, Cross Polarization,</b>	25	25	25	25	25	25	25	25

# NHHSS-55C-R2BT4

## dB

<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	30	30	30
<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	200	200	200	100	100	100

## Electrical Specifications, BASTA

<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>Gain by all Beam Tilts, average, dBi</b>	15.8	15.8	17.5	18	18.2	17.5	17.3	17.1
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.7	±0.5	±0.8	±0.3	±0.4	±0.6	±0.4	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3	±2	±4	±4	±6	±6	±4	±10
<b>Beamwidth, Vertical Tolerance, degrees</b>	±1.3	±0.5	±0.4	±0.2	±0.4	±0.5	±0.3	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	13	15	14	16	16	12	13	14
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	23	27	27	29	29	24	22	21
<b>CPR at Boresight, dB</b>	21	26	17	24	27	14	15	15

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.36 m <sup>2</sup>   3.875 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.32 m <sup>2</sup>   3.444 ft <sup>2</sup>
<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 kg   112.436 lb

# NHHSS-55C-R2BT4

---

## Regulatory Compliance/Certifications

Agency	Classification
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

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

# 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.

## Product Classification

**Product Type** Downtilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 115 mm | 4.528 in

**Compatible Diameter, minimum** 60 mm | 2.362 in

**Weight, net** 6.2 kg | 13.669 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 6.4 kg | 14.11 lb

## Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# BSAMNT-3

---

