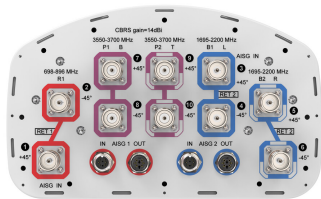


# NHHSS-65A-R2BT8-V2



10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3550–3700 MHz, 65° HPBW, 2x RETs and 2x SBTs

- Perfect antenna to add 3.5GHz CBRS to macro sites
- Low band and mid band performance mirrors the performance of existing NHH hex port antennas
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT 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 bands are controlled by one RET to ensure same tilt level for 4x MIMO

## General Specifications

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

## Remote Electrical Tilt (RET) Information

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

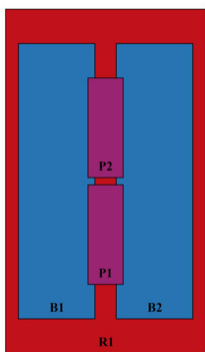
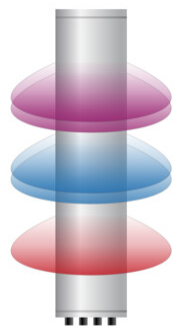
# NHHSS-65A-R2BT8-V2

Internal RET	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	1413 mm   55.63 in
Net Weight, without mounting kit	16.7 kg   36.817 lb

## Array Layout

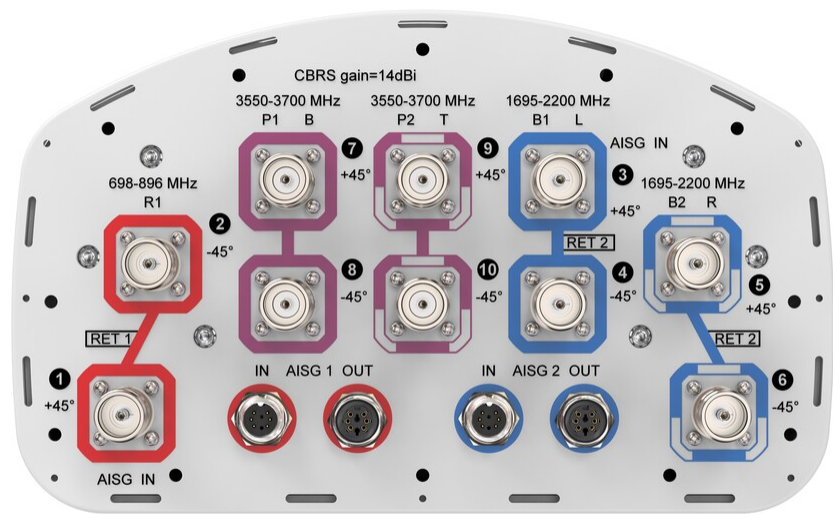


Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxR1
B1	1695-2200	3 - 4	65°	2	AISG2	CPxxxxxxxxxxxxxxB1
B2	1695-2200	5 - 6	65°			
P1	3550-3700	7 - 8	65°	N/A	NA	N/A
P2	3550-3700	9 - 10	65°			

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

## Port Configuration

# NHHSS-65A-R2BT8-V2



## Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz   3550 – 3700 MHz   698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	3550–3700
Gain, dBi	13.7	13.8	16.1	16.8	16.9	12.7
Beamwidth, Horizontal, degrees	67	64	69	64	63	60
Beamwidth, Vertical, degrees	16.3	14.4	6.6	6.2	6	19.9
Beam Tilt, degrees	0–18	0–18	0–10	0–10	0–10	8
USLS (First Lobe), dB	19	18	16	17	18	14
Front-to-Back Ratio at 180°, dB	28	34	29	29	28	33
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
VSWR   Return loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0

# NHHSS-65A-R2BT8-V2

<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-145
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	250	250	250	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>3550–3700</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13.4	13.5	15.7	16.3	16.5	12.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.5	±0.7	±0.5	±0.5	±0.6
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	24	25	23	23	22	24
<b>CPR at Boresight, dB</b>	24	23	17	18	19	17
<b>CPR at Sector, dB</b>	11	9	10	10	10	2

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	206.0 N @ 150 km/h (46.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	169.0 N @ 150 km/h (38.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	396.0 N @ 150 km/h (89.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	208.0 N @ 150 km/h (46.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	441 mm   17.362 in
<b>Depth, packed</b>	337 mm   13.268 in
<b>Length, packed</b>	1558 mm   61.339 in
<b>Weight, gross</b>	28.5 kg   62.832 lb

## Regulatory Compliance/Certifications

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

# NHHSS-65A-R2BT8-V2

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## 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

# 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

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