

# NHHSS-45C-R2BT10



10-port sector antenna, 2x 698–896, 4x 1695–2200 MHz and 4x 3100–4200, 45° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

- 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
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- Interleaved dipole technology providing for attractive, low wind load mechanical package
- One LB RET and one HB RET. Both high bands are controlled by one RET to ensure same tilt level for 4x MIMO

## OBsolete

This product was discontinued on: March 30, 2023

Replaced By:

NHHSS-45C-R2BT4 10-port sector antenna, 2x 698–896, 4x 1695–2200 MHz and 4x 3100–4200, 45° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

## 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

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RF Connector Quantity, total

10

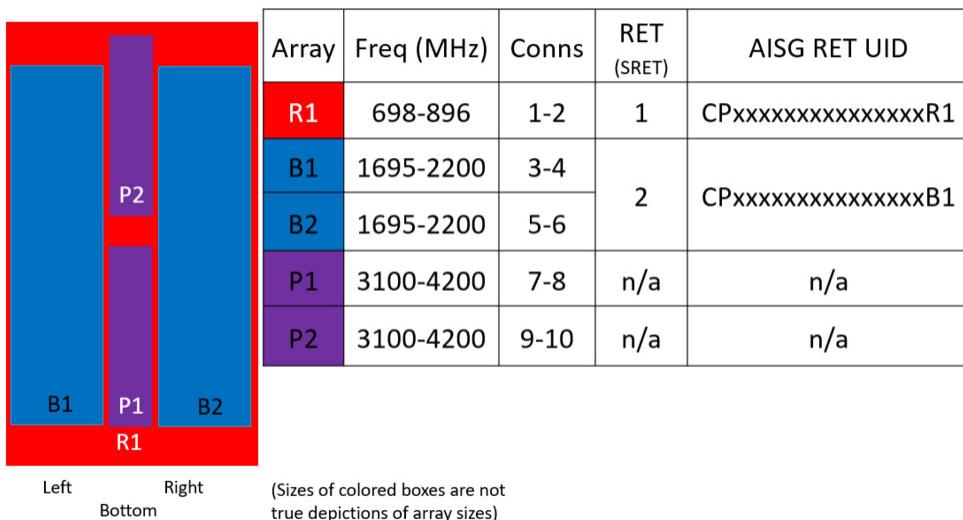
## Remote Electrical Tilt (RET) Information

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 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

## Dimensions

Width	457 mm   17.992 in
Depth	178 mm   7.008 in
Length	2437 mm   95.945 in
Net Weight, antenna only	41.5 kg   91.492 lb

## Array Layout



## Port Configuration

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2200 MHz   3100 – 4200 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>3700–4200</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>	18	18.6	19.3	19.7	20.3	16.8	17.1	16.6
<b>Beamwidth, Horizontal, degrees</b>	46	41	45	43	41	49	43	41
<b>Beamwidth, Vertical, degrees</b>	9.3	8.2	5.7	5.4	5.1	9.8	8.7	8.9
<b>Beam Tilt, degrees</b>	0–10	0–10	0–8	0–8	0–8	10	10	10
<b>USLS (First Lobe), dB</b>	18	22	15	16	16	16	16	13
<b>Front-to-Back Ratio at 180°, dB</b>	32	34	33	34	36	32	31	28
<b>CPR at Boresight, dB</b>	20	21	19	19	17	15	16	14
<b>Isolation, Cross Polarization,</b>	25	25	25	25	25	25	25	25

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## dB

<b>Isolation, Inter-band, dB</b>	30	30	28	28	28	28	28	28
<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	250	250	250	100	100	100

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	315.0 N @ 150 km/h (70.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	1,304.0 N @ 150 km/h (293.2 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	526 mm   20.709 in
<b>Depth, packed</b>	283 mm   11.142 in
<b>Length, packed</b>	2604 mm   102.52 in
<b>Weight, gross</b>	60.5 kg   133.38 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.
- BSAMNT-M
  - Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

## \* Footnotes

# NHHSS-45C-R2BT10

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**Performance Note**

Severe environmental conditions may degrade optimum performance

# BSAMNT-3

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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

<b>Product Type</b>	Downtilt mounting kit
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## General Specifications

<b>Application</b>	Outdoor
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<b>Color</b>	Silver
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## Dimensions

<b>Compatible Diameter, maximum</b>	115 mm   4.528 in
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<b>Compatible Diameter, minimum</b>	60 mm   2.362 in
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<b>Weight, net</b>	6.2 kg   13.669 lb
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## Material Specifications

<b>Material Type</b>	Galvanized steel
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## Packaging and Weights

<b>Included</b>	Brackets   Hardware
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<b>Packaging quantity</b>	1
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<b>Weight, gross</b>	6.4 kg   14.11 lb
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# BSAMNT-3

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# BSAMNT-M

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Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

## Product Classification

<b>Product Type</b>	Downtilt mounting kit
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## General Specifications

<b>Application</b>	Outdoor
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<b>Color</b>	Silver
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## Dimensions

<b>Compatible Diameter, maximum</b>	115 mm   4.528 in
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<b>Compatible Diameter, minimum</b>	60 mm   2.362 in
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<b>Weight, net</b>	4.5 kg   9.921 lb
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## Material Specifications

<b>Material Type</b>	Galvanized steel
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## Packaging and Weights

<b>Included</b>	Brackets   Hardware
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<b>Packaging quantity</b>	1
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## 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.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

