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

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

Grounding TypeRF 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 MaterialAluminumRF Connector Interface4.3-10 Female

RF Connector LocationBottom

RF Connector Quantity, high band 4
RF Connector Quantity, mid band 4
RF Connector Quantity, low band 2

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NHHSS-45C-R2BT10

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 $10~\mathrm{W}$ Power Consumption, idle state, maximum $2~\mathrm{W}$

Protocol 3GPP/AISG 2.0

Dimensions

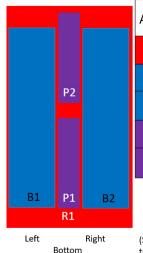
 Width
 457 mm | 17.992 in

 Depth
 178 mm | 7.008 in

 Length
 2437 mm | 95.945 in

 Net Weight, antenna only
 41.5 kg | 91.492 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID	
R1	698-896	1-2	1	CPxxxxxxxxxxxxxXR1	
B1	1695-2200	3-4	,	CD	
B2	1695-2200	5-6	2	CPxxxxxxxxxxxxxB1	
P1	3100-4200	7-8	n/a	n/a	
P2	3100-4200	9-10	n/a	n/a	

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

Port Configuration

ANDREW® an Amphenol company



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2200 MHz | 3100 – 4200 MHz | 698 – 896 MHz

Polarization ±45°

Total Input Power, maximum 1,000 W @ 50 °C

Electrical Specifications

	R1	R1	B1,B2	B1,B2	B1,B2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-220	0 3100-355	0 3550-370	0 3700-4200
RF Port	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
Gain, dBi	18	18.6	19.3	19.7	20.3	16.8	17.1	16.6
Beamwidth, Horizontal, degrees	46	41	45	43	41	49	43	41
Beamwidth, Vertical, degrees	9.3	8.2	5.7	5.4	5.1	9.8	8.7	8.9
Beam Tilt, degrees	0-10	0-10	0-8	0-8	0-8	10	10	10
USLS (First Lobe), dB	18	22	15	16	16	16	16	13
Front-to-Back Ratio at 180°, dB	32	34	33	34	36	32	31	28
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25

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Isolation, Inter-band, dB	30	30	28	28	28	28	28	28
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	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-145	-145	-145
Input Power per Port at 50°C,	250	250	250	250	250	100	100	100

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 315.0 N @ 150 km/h (70.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 1,304.0 N @ 150 km/h (293.2 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

 Width, packed
 526 mm | 20.709 in

 Depth, packed
 283 mm | 11.142 in

 Length, packed
 2604 mm | 102.52 in

 Weight, gross
 60.5 kg | 133.38 lb

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.

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

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

ApplicationOutdoorColorSilver

Dimensions

Agency

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net6.2 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

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 www.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant





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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

ApplicationOutdoorColorSilver

Dimensions

Compatible Diameter, maximum115 mm | 4.528 inCompatible Diameter, minimum60 mm | 2.362 inWeight, net4.5 kg | 9.921 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Regulatory Compliance/Certifications

Agency Classification

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 www.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



