NHH-45A-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- One LB RET and one HB RET. Both high bands are controlled by one RET to ensure same tilt level for 4x Rx or 4x MIMO
- Separate RS-485 RET input/output for low and high band

General Specifications

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

Grounding TypeRF connector body grounded to reflector and mounting bracket

Performance Note Outdoor usage | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

Radome Material Fiberglass, UV resistant

Radiator Material Copper | 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, low band 2
RF Connector Quantity, total 6

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



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Internal RET High band (1) | Low 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
 457 mm | 17.992 in

 Depth
 178 mm | 7.008 in

 Length
 1220 mm | 48.032 in

Net Weight, antenna only 21 kg | 46.297 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID	
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxxR1	
Y1	1695-2360	3 - 4			60	
Y2	1695-2360	5 - 6	2	AISG2	CPxxxxxxxxxxxxxY1	

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2360 MHz | 698 – 896 MHz

Polarization ±45°

Total Input Power, maximum 800 W @ 50 °C

Electrical Specifications

	R1	R1	Y1-Y2	Y1-Y2	Y1-Y2	Y1-Y2
Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200	2300-2360
RF Port	1-2	1-2	3-6	3-6	3-6	3-6
Gain, dBi	15.5	16.2	18.3	19	19.2	20
Beamwidth, Horizontal, degrees	48	44	44	44	43	39
Beamwidth, Vertical, degrees	18.5	16.8	7.9	7.3	6.8	6
Beam Tilt, degrees	2-18	2-18	1-9	1-9	1-9	1-9
USLS (First Lobe), dB	16	17	17	16	15	15
Front-to-Back Ratio at 180°, dB	32	33	36	36	36	35
CPR at Boresight, dB	24	25	15	18	19	20
Isolation, Cross Polarization,	25	25	25	25	25	25

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dB						
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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 677.0 N @ 150 km/h (152.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 135.0 N @ 150 km/h (30.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 677.0 N @ 150 km/h (152.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 595.0 N @ 150 km/h (133.8 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
 1387 mm | 54.606 in

 Weight, gross
 32.8 kg | 72.312 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.andrew.com/ProductCompliance
ROHS	Compliant/Exempted
UK-ROHS	Compliant



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

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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

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



