NNH4SS-65A-R3BT8



16- Port sector antenna, 4x 698-896, 8x 1695-2360 and 4x 3550-3700MHz, 65° HPBW, 3x RETs and 3x SBTs

- Features broadband Low Band (698-896 MHz), Mid Band (1695-2360 MHz) and High Band (3550-3700 MHz) arrays for 4T4R (4X MIMO) capability for bands 5, 13, 25, 66 and 48. Also covers bands 12, 14, 29, and 30
- Perfect antenna to add 3.5GHz CBRS to macro sites
- Non-stacked mid band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs
- Array configuration provides capability for 4T4R (4X MIMO) on Low Band, dual 4T4R (4X MIMO) on Mid Band and 4T4R (4X MIMO) on High Band)
- Excellent wind loading characteristics

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 MaterialFiberglass, UV resistantRadiator MaterialLow loss circuit board

Reflector MaterialAluminumRF Connector Interface4.3-10 Female

RF Connector Location

RF Connector Quantity, high band

RF Connector Quantity, mid band

RF Connector Quantity, low band

4

RF Connector Quantity, total

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v2

RET Interface 8-pin DIN Female | 8-pin DIN Male

RET Interface, quantity 3 female | 3 male

Input Voltage 10-30 Vdc

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Internal Bias Tee Port 1 | Port 5 | Port 9

Internal RET Low band (1) | Mid band (2)

Power Consumption, active state, maximum 10 W Power Consumption, idle state, maximum 2 W

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

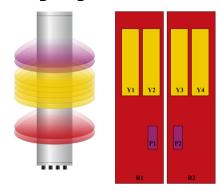
Width 498 mm | 19.606 in

Depth 197 mm | 7.756 in

Length 1499 mm | 59.016 in

Net Weight, antenna only 31 kg | 68.343 lb

Array Layout



Array ID	Frequency (MHz)	quency (MHz) RF Connector RET (SRET) AISG No.		AISG No.	AISG RET UID	
R1	698-896	1 - 2		11564	60	
R2	698-896	3 - 4	1	AISG1	CPxxxxxxxxxxxxxxxxR1	
Y1	1695-2360	5 - 6	2	AISG2	CPxxxxxxxxxxxxxxY1	
Y2	1695-2360	7 - 8				
Y3	1695-2360	9 - 10	3	AISG3	CPxxxxxxxxxxxxxY3	
Y4	1695-2360	11 - 12	3	AISG3	CPXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
P1	3550-3700	13 - 14	NI/A	NA.	N/A	
P2	3550-3700	15 - 16	N/A	NA	N/A	

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2360 MHz | 3550 – 3700 MHz | 698 – 896 MHz

Polarization ±45°

Total Input Power, maximum 1,600 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4	P1,P2
Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2180	2300-2360	3550-3700
RF Port	1-4	1-4	5-12	5-12	5-12	5-12	13-16
Gain, dBi	13.1	13.4	15.8	16.5	17.3	17.8	13.8
Beamwidth, Horizontal, degrees	72	64	71	69	63	59	66
Beamwidth, Vertical, degrees	17.2	15	8	7.4	7	6.3	17.3
Beam Tilt, degrees	2-16	2-16	2-12	2-12	2-12	2-12	8
USLS (First Lobe), dB	19	15	14	16	16	18	19
Front-to-Back Ratio at 180°, dB	30	28	32	32	32	33	35
Isolation, Cross Polarization,	25	25	25	25	25	25	25

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dB							
Isolation, Inter-band, dB	25	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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153	-145
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200	100

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 498.0 N @ 150 km/h (112.0 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 148.0 N @ 150 km/h (33.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 597.0 N @ 150 km/h (134.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 342.0 N @ 150 km/h (76.9 lbf @ 150 km/h)

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

Packaging and Weights

 Width, packed
 565 mm | 22.244 in

 Depth, packed
 309 mm | 12.165 in

 Length, packed
 1686 mm | 66.378 in

 Weight, gross
 43.7 kg | 96.342 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.

* 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



