

NNH4SS-65C-R4



16- Port sector antenna, 4x 698-896, 8x 1695-2360 and 4x 3400-4000MHz, 65° HPBW, 4x RETs

- Features broadband Low Band (698-896 MHz), Mid Band(1695-2360 MHz) and High Band (3400-4000 MHz) arrays for 4T4R (4X MIMO) capability for bands 5, 13, 25, 66 and 48. Also covers bands 12, 14, 29, and 30
- Perfect for adding 3.5 GHz bands like CBRS, C-band or DOD to macro sites
- Non-stacked high 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 Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Radiator Material	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	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	16

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc

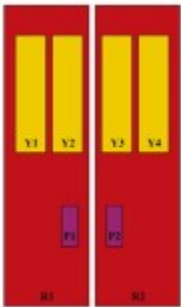
NNH4SS-65C-R4

Internal RET	High band (1) 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	2438 mm 95.984 in
Net Weight, without mounting kit	46 kg 101.413 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (RET1)	AISG No.	RET UID
R1	698-896	1 - 2	1	AISG1	CPooooooooooooMM.1
R2	698-896	3 - 4			
Y1	1695-2360	5 - 6	2	AISG1	CPooooooooooooMM.2
Y2	1695-2360	7 - 8			
Y3	1695-2360	9 - 10	3	AISG1	CPooooooooooooMM.3
Y4	1695-2360	11 - 12			
P1	3400-4000	13 - 14	4	AISG1	CPooooooooooooMM.4
P2	3400-4000	15 - 16			

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

Port Configuration

NNH4SS-65C-R4



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz 3400 – 4000 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	P1,P2	P1,P2
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360	3400–3550	3550–3700	3700–4000
RF Port	1-4	1-4	5-12	5-12	5-12	5-12	13-16	13-16	13-16
Gain, dBi	15.4	15.9	17.3	17.9	18.5	18.8	16.9	17.4	17.6
Beamwidth, Horizontal, degrees	73	66	69	68	61	58	77	70	67
Beamwidth, Vertical, degrees	9.8	8.4	5.8	5.4	5.1	4.7	7.3	7.1	6.7
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	16	16	16	18	18	18	17	17	17

NNH4SS-65C-R4

Front-to-Back Ratio at 180°, dB	29	31	32	32	32	36	30	30	31
CPR at Boresight, dB	24	26	19	20	21	21	15	15	16
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	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	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-145	-145	-145
Input Power per Port at 50° C, maximum, watts	300	300	300	250	250	200	100	100	100

Mechanical Specifications

Wind Loading @ Velocity, frontal	865.0 N @ 150 km/h (194.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,037.0 N @ 150 km/h (233.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	595.0 N @ 150 km/h (133.8 lbf @ 150 km/h)
Wind Speed, maximum	241.4 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm 22.244 in
Depth, packed	309 mm 12.165 in
Length, packed	2685 mm 105.709 in
Weight, gross	61 kg 134.482 lb

Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

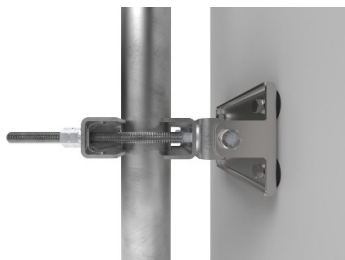
Included Products

BSAMNT-3F	–	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
-----------	---	--

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
------------------	---

BSAMNT-3F



Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.

Product Classification

Product Type Fixed tilt 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 5.6 kg | 12.346 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 5.8 kg | 12.787 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 www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

BSAMNT-3F

