

NNH4SS-65B-R3BT8



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

- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Excellent wind loading characteristics
- Features broadband Low Band (698-896 MHz) and High Band (1695-2360 MHz) arrays for 4T4R (4X MIMO) capability for Band 14, AWS, PCS and WCS applications
- Perfect antenna to add 3.5GHz CBRS to macro sites
- Non-stacked high band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs

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	3 female 3 male
Input Voltage	10–30 Vdc
Internal RET	Low band (1) Mid band (2)

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Protocol 3GPP/AISG 2.0

Dimensions

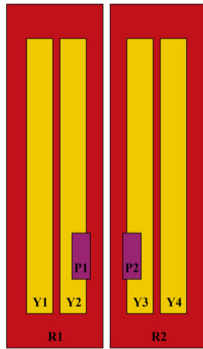
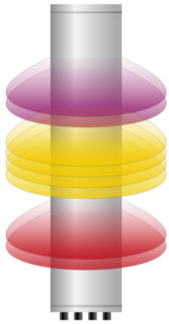
Width 498 mm | 19.606 in

Depth 197 mm | 7.756 in

Length 1848 mm | 72.756 in

Net Weight, without mounting kit 34.9 kg | 76.941 lb

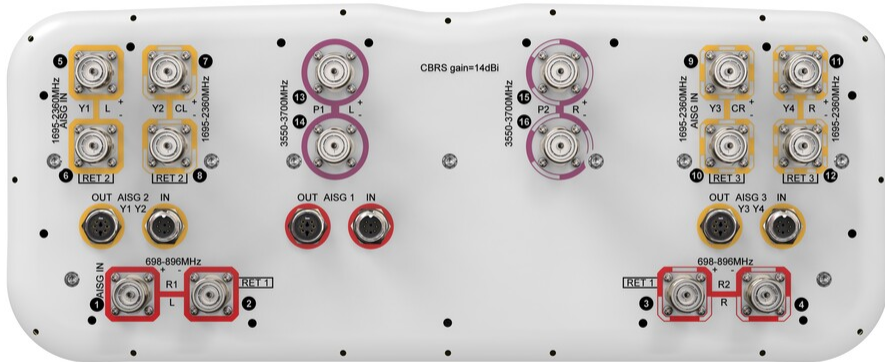
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
R2	698-896	3 - 4			
Y1	1695-2360	5 - 6	2	AISG2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2360	7 - 8			
Y3	1695-2360	9 - 10	3	AISG3	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2360	11 - 12			
P1	3550-3700	13 - 14	N/A	NA	N/A
P2	3550-3700	15 - 16			

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

Port Configuration



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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

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360	3550–3700
Gain, dBi	14.3	14.9	16.7	17.3	17.8	18.1	13.9
Beamwidth, Horizontal, degrees	71	63	71	67	62	60	62
Beamwidth, Vertical, degrees	11.4	10.1	6.9	6.4	6.1	5.6	16.2
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12	8
USLS (First Lobe), dB	16	17	15	17	18	20	15
Front-to-Back Ratio at 180°, dB	30	28	36	35	34	36	33
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
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

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360	3550–3700
Gain by all Beam Tilts, average, dBi	13.9	14.6	16.2	16.9	17.4	17.8	13.5
Gain by all Beam Tilts Tolerance, dB	±0.6	±0.5	±0.8	±0.5	±0.5	±0.4	±0.6
Front-to-Back Total Power at 180° ± 30°, dB	20	21	27	26	27	28	25
CPR at Boresight, dB	24	26	23	22	21	21	18
CPR at Sector, dB	15	11	7	4	5	6	7

Mechanical Specifications

Wind Loading @ Velocity, frontal	629.0 N @ 150 km/h (141.4 lbf @ 150 km/h)
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Wind Loading @ Velocity, lateral	191.0 N @ 150 km/h (42.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	755.0 N @ 150 km/h (169.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	433.0 N @ 150 km/h (97.3 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	599 mm 23.583 in
Depth, packed	349 mm 13.74 in
Length, packed	1989 mm 78.307 in
Weight, gross	50.1 kg 110.451 lb

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.commscope.com/ProductCompliance
ROHS	Compliant
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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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