

NNH4-65B-R6N17



12-port sector antenna, 4x 694–896 and 8x 1695–2360 MHz, 65° HPBW, 6x RETs

- Array configuration provides capability for 4T4R (4x MIMO) on Low band and High band
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics
- The antenna is supplied with mounting kits that provide 0 degree of mechanical downtilt; optional downtilt mounting kits are available

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	Aluminum Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

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	High band (4) Low band (2)
Power Consumption, idle state, maximum	1 W
Power Consumption, normal conditions, maximum	8 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

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Dimensions

Width	430 mm 16.929 in
Depth	197 mm 7.756 in
Length	1848 mm 72.756 in
Net Weight, without mounting kit	32 kg 70.548 lb

Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-896	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-896	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2360	7-8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2360	9-10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2360	11-12	6	CPxxxxxxxxxxxxxxxxY4

(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 694 – 896 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	694–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain, dBi	13.7	14.5	16.3	17.1	17.6	18.2
Beamwidth, Horizontal, degrees	63	57	66	60	59	55
Beamwidth, Vertical, degrees	12.6	10.9	6.8	6.3	6	5.4
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	20	18	14	15	17	18
Front-to-Back Ratio at 180°, dB	30	32	31	34	33	30
Isolation, Cross Polarization, dB	25	25	25	25	25	25
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

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PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	694–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	13.3	14.2	15.7	16.6	17.1	17.7
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.4	±0.6	±0.7	±0.5	±0.5
Gain by Beam Tilt, average, dBi	2° 13.4 8° 13.4 14° 13.2	2° 14.3 8° 14.3 14° 13.9	2° 15.5 7° 15.9 12° 15.6	2° 16.4 7° 16.8 12° 16.4	2° 16.8 7° 17.3 12° 17.0	2° 17.6 7° 18.0 12° 17.3
Beamwidth, Horizontal Tolerance, degrees	±8.8	±5.7	±8.1	±5.3	±4.6	±3.4
Beamwidth, Vertical Tolerance, degrees	±1.1	±0.7	±0.5	±0.4	±0.4	±0.2
USLS, beampeak to 20° above beampeak, dB	20	18	13	14	15	13
Front-to-Back Total Power at 180° ± 30°, dB	24	22	26	27	27	27
CPR at Boresight, dB	20	22	18	19	20	21
CPR at Sector, dB	9	6	9	6	4	6

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.44 m ² 4.736 ft ²
Effective Projective Area (EPA), lateral	0.23 m ² 2.476 ft ²
Mechanical Tilt Range	0°–18°
Wind Loading @ Velocity, frontal	471.0 N @ 150 km/h (105.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	241.0 N @ 150 km/h (54.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	762.0 N @ 150 km/h (171.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	445.0 N @ 150 km/h (100.0 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	530 mm 20.866 in
Depth, packed	349 mm 13.74 in
Length, packed	2020 mm 79.528 in

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Weight, gross

42.3 kg | 93.255 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/Exempted



Included Products

BSAMNT-2F

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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