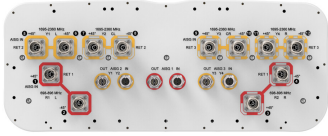


NNH4-65C-R3B-V1



12-port sector antenna, 4x 698–896 and 8x 1695–2360 MHz, 65° HPBW, 3x RET, 3x SBT.

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	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

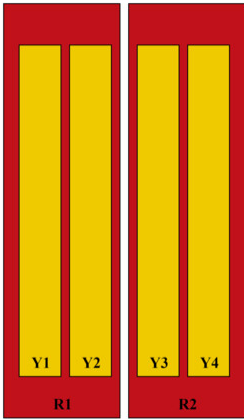
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	3 female 3 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 5 Port 9
Internal RET	High band (2) Low band (1)
Power Consumption, active state, maximum	13 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

NNH4-65C-R3B-V1

Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2438 mm 95.984 in
Net Weight, antenna only	50 kg 110.231 lb

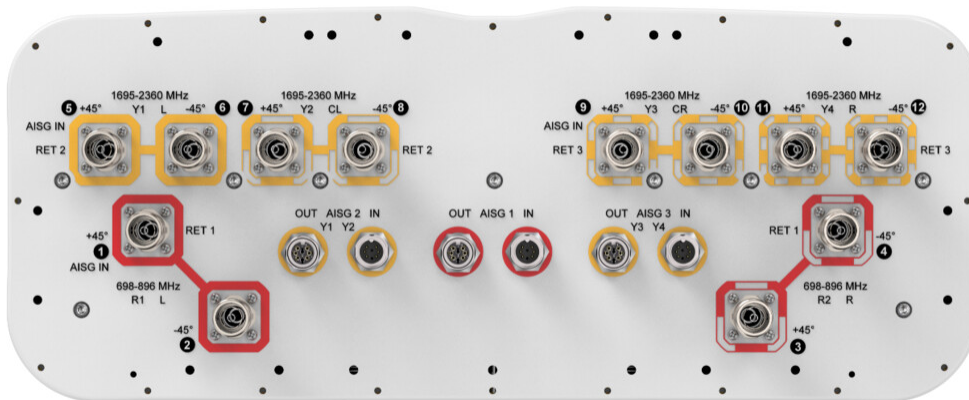
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	698-896	1 - 2	1	CPxxxxxxxxxxxxxxxxR1
R2	698-896	3 - 4		
Y1	1695-2360	5 - 6	2	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2360	7 - 8		
Y3	1695-2360	9 - 10	3	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2360	11 - 12		

(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	900 W @ 50 °C

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Electrical Specifications

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain, dBi	15.4	16.2	17.3	17.8	18.4	18.5
Beamwidth, Horizontal, degrees	72	65	69	69	64	59
Beamwidth, Vertical, degrees	9.5	8.3	5.6	5.2	5	4.6
Beam Tilt, degrees	0–10	0–10	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	15	18	19	21	21	23
Front-to-Back Ratio at 180°, dB	31	31	34	34	35	36
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
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	300	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
Gain by all Beam Tilts, average, dBi	15.1	15.9	16.8	17.3	17.9	18
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.3	±0.6	±0.7	±0.7	±0.6
Beamwidth, Horizontal Tolerance, degrees	±8.2	±2.2	±8.3	±9.4	±6.6	±5
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	15	17	17	17	18	16
Front-to-Back Total Power at 180° ± 30°, dB	23	23	28	27	28	28
CPR at Boresight, dB	20	23	20	22	20	19
CPR at Sector, dB	11	10	9	8	8	6

Mechanical Specifications

Wind Loading @ Velocity, frontal	954.0 N @ 150 km/h (214.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	331.0 N @ 150 km/h (74.4 lbf @ 150 km/h)

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Wind Loading @ Velocity, maximum	1,235.0 N @ 150 km/h (277.6 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	785.0 N @ 150 km/h (176.5 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	2685 mm 105.709 in
Weight, gross	69.9 kg 154.103 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.
BSAMNT-M	-	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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