NNH4-65C-R6-HG

12-port sector antenna, 4x 698-896 and 8x 1695–2360 MHz, 65° HPBW, 6x RET.

- 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
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	0
RF Connector Quantity, mid 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	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	Low band (2) | Mid band (4)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

Dimensions

Width	640 mm | 25.197 in
Depth	235 mm | 9.252 in
Length	2438 mm | 95.984 in

NNH4-65C-R6-HG

Net Weight, antenna only	65.5 kg | 144.403 lb

Array Layout

Array	Freq (MHz)	Conns	RET (MRET)	AISG RET UID
R1	698-896	1-2	1	CPxxxxxxxxxxxxxxxxmm.1
R2	698-896	3-4	2	CPxxxxxxxxxxxxxxxxmm.2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxxmm.3
Y2	1695-2360	7-8	4	CPxxxxxxxxxxxxxxxxmm.4
Y3	1695-2360	9-10	5	CPxxxxxxxxxxxxxxxxmm.5
Y4	1695-2360	11-12	6	CPxxxxxxxxxxxxxxxxmm.6

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

Port Configuration

Electrical Specifications

Impedance	50 ohm

NNH4-65C-R6-HG

Operating Frequency Band	1695 – 2360 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	Y1,Y2,Y3,Y4	Y1,Y2,Y3,Y4	Y1,Y2,Y3,Y4	Y1,Y2,Y3,Y4
Frequency Band, MHz	**698–806**	**824–896**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
RF Port	1,2,3,4	1,2,3,4	5-12	5-12	5-12	5-12
Gain, dBi	16.3	16.9	19.5	19.8	20	20
Beamwidth, Horizontal, degrees	68	64	60	59	60	64
Beamwidth, Vertical, degrees	9.5	8.2	4.3	4	3.8	3.5
Beam Tilt, degrees	0–10	0–10	0–7	0–7	0–7	0–7
USLS (First Lobe), dB	18	19	22	24	21	21
Front-to-Back Ratio at 180°, dB	32	32	35	34	33	35
Front-to-Back Total Power at 180° ± 30°, dB	24	25	28	27	26	29
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	28	28	28	28
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	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	200	200	200	200	200	150

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,055.0 N @ 150 km/h (237.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,433.0 N @ 150 km/h (322.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,086.0 N @ 150 km/h (244.1 lbf @ 150 km/h)
Wind Speed, maximum	241.4 km/h (150 mph)

Packaging and Weights

Width, packed	752 mm | 29.606 in
Depth, packed	382 mm | 15.039 in

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Length, packed	2590 mm | 101.969 in
Weight, gross	83.8 kg | 184.747 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-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