

NNHH-45A-R4



8-port sector antenna, 4x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 4x RET

- Interleaved dipole technology providing for attractive, low wind load mechanical package

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	0
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information

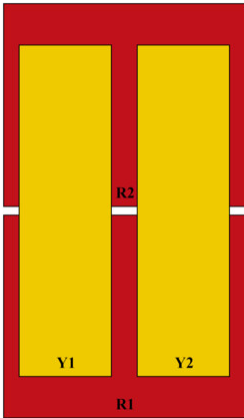
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (2) Low band (2)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

NNHH-45A-R4

Dimensions

Width	457 mm 17.992 in
Depth	178 mm 7.008 in
Length	1399 mm 55.079 in
Net Weight, antenna only	26 kg 57.32 lb
TDD Column Spacing	210 mm 8.268 in

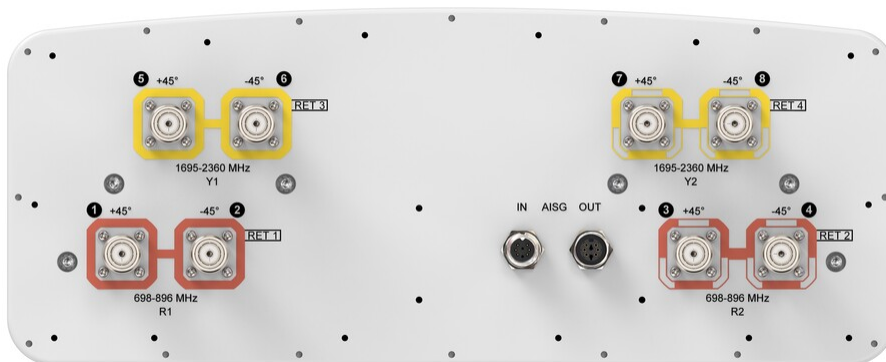
Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG RET UID
R1	698-896	1 - 2	1	CPxxxxxxxxxxxxMM.1
R2	698-896	3 - 4	2	CPxxxxxxxxxxxxMM.2
Y1	1695-2360	5 - 6	3	CPxxxxxxxxxxxxMM.3
Y2	1695-2360	7 - 8	4	CPxxxxxxxxxxxxMM.4

(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°

NNHH-45A-R4

Total Input Power, maximum 1,000 W

Electrical Specifications

	R1,R2	R1,R2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2180	2300–2360
RF Port	1-4	1-4	5-8	5-8	5-8	5-8
Gain, dBi	12.7	13.4	17.4	18	18.6	19
Gain at Mid Tilt, dBi	12.2	13.2	17	17.8	18.4	18.9
Beamwidth, Horizontal, degrees	48	43	45	43	41	38
Beamwidth, Vertical, degrees	35.6	30.5	8.3	7.7	7.3	6.5
Beam Tilt, degrees	2–18	2–18	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	20	19	20	21	21	21
Front-to-Back Ratio at 180°, dB	29	32	36	36	38	37
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	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	200

Mechanical Specifications

Wind Loading @ Velocity, frontal	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	159.0 N @ 150 km/h (35.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	692.0 N @ 150 km/h (155.6 lbf @ 150 km/h)
Wind Speed, maximum	241.4 km/h (150 mph)

Packaging and Weights

Width, packed	526 mm 20.709 in
Depth, packed	283 mm 11.142 in
Length, packed	1566 mm 61.654 in
Weight, gross	35.7 kg 78.705 lb

NNHH-45A-R4

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 – 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