NNHH-45C-R4

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

- Independent tilt for all arrays
- Optimized SPR performance across all operating bands
- Excellent wind loading characteristics

General Specifications

Antenna Type	Sector with internal RET
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 (Multi-RET)

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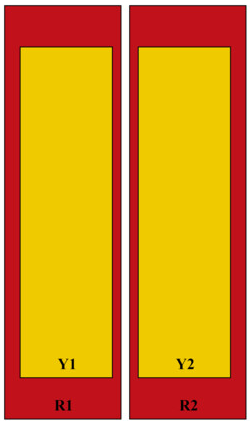
Dimensions

Width	640 mm | 25.197 in
Depth	235 mm | 9.252 in
Length	2437 mm | 95.945 in
Net Weight, antenna only	61 kg | 134.482 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxMM.1
R2	698-896	3 - 4	2	AISG1	CPxxxxxxxxxxxxMM.2
Y1	1695-2360	5 - 6	3	AISG1	CPxxxxxxxxxxxxMM.3
Y2	1695-2360	7 - 8	4	AISG1	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°
Total Input Power, maximum	900 W @ 50 °C

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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	1,2,3,4	1,2,3,4	5,6,7,8	5,6,7,8	5,6,7,8	5,6,7,8
Gain, dBi	16.4	17.1	18.8	19.2	20	20.5
Gain at Mid Tilt, dBi	16	17	18.4	19.1	19.6	20.5
Beamwidth, Horizontal, degrees	51	45	46	49	47	38
Beamwidth, Vertical, degrees	9.6	8.4	5.7	5.3	5	4.5
Beam Tilt, degrees	2–14	2–14	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	14	15	15	16	16	18
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	28	30	26	26	27	26
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, maximum, watts	350	350	300	300	300	250

Mechanical Specifications

Wind Loading @ Velocity, frontal	954.0 N @ 150 km/h (214.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,434.0 N @ 150 km/h (322.4 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
Length, packed	2590 mm | 101.969 in
Weight, gross	79.2 kg | 174.606 lb

Regulatory Compliance/Certifications

Agency	Classification

NNHH-45C-R4

CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant
UK-ROHS	Compliant

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