NNHH-45B-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
- 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 TypeRF connector inner conductor and body grounded to reflector and

mounting bracket

Performance Note Outdoor usage | Wind loading figures are validated by wind tunnel

measurements described in white paper WP-112534-EN

Radome Material Fiberglass, UV resistant

Radiator Material Aluminum | Low loss circuit board

Reflector Material Aluminum

RF Connector Interface 4.3-10 Female

RF Connector LocationBottom

RF Connector Quantity, high band 4

RF Connector Quantity, mid band

RF Connector Quantity, low band

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, idle state, maximum 1 W Power Consumption, normal conditions, maximum 8 W



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Protocol 3GPP/AISG 2.0 (Multi-RET)

Dimensions

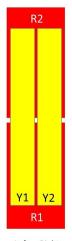
 Width
 457 mm | 17.992 in

 Depth
 178 mm | 7.008 in

Length 1828 mm | 71.969 in

Net Weight, without mounting kit 34.5 kg | 76.059 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	CPxxxxxxxxxxxxxxxmm.2
Y1	1695-2360	5-6	3	CPxxxxxxxxxxxxxxxmm.3
Y2	1695-2360	7-8	4	CPxxxxxxxxxxxxxxxmm.4

Left Right Bottom (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

Electrical Specifications

•						
Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2180	2300-2360
Gain, dBi	14	14.9	19.4	20	20.5	21
Beamwidth, Horizontal, degrees	49	42	45	43	41	38
Beamwidth, Vertical, degrees	24.4	21.6	5.9	5.5	5.1	4.6
Beam Tilt, degrees	2-18	2-18	2-12	2-12	2-12	2-12
USLS (First Lobe), dB	18	19	14	15	15	17
Front-to-Back Ratio at 180°, dB	32	34	35	37	39	38
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,	300	300	300	300	300	250

maximum, watts

Mechanical Specifications

Effective Projective Area (EPA), frontal 1.01 m² | 10.872 ft² Effective Projective Area (EPA), lateral 0.21 m² | 2.26 ft²

Mechanical Tilt Range 0°-15°

 Wind Loading @ Velocity, frontal
 1,077.0 N @ 150 km/h (242.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 222.0 N @ 150 km/h (49.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,077.0 N @ 150 km/h (242.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 946.0 N @ 150 km/h (212.7 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

 Width, packed
 526 mm | 20.709 in

 Depth, packed
 283 mm | 11.142 in

 Length, packed
 2015 mm | 79.331 in

 Weight, gross
 47.4 kg | 104.499 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

