

NNHH-45B-R4-V1



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
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, mid band	4
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	Low band (2) Mid band (2)
Power Consumption, active state, maximum	8 W
Power Consumption, idle state, maximum	1 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

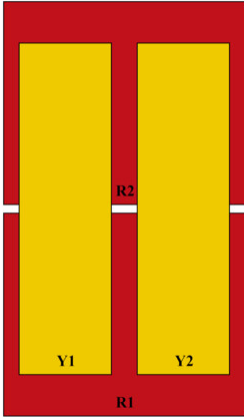
Width	457 mm 17.992 in
Depth	178 mm 7.008 in
Length	1848 mm 72.756 in

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Net Weight, antenna only

36.5 kg | 80.469 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxR1
R2	698-896	3 - 4	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1695-2360	5 - 6	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2360	7 - 8	4	AISG1	CPxxxxxxxxxxxxY2

(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°

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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
RF Port	1-4	1-4	5-8	5-8	5-8	5-8
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
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	300	300	250

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	13.7	14.7	18.9	19.8	20.1	20.7
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.6	±0.5	±0.4	±0.3
Beamwidth, Horizontal Tolerance, degrees	±2	±3	±3	±1	±2	±2
Beamwidth, Vertical Tolerance, degrees	±1.6	±1.8	±0.4	±0.2	±0.3	±0.2
USLS, beampeak to 20° above beampeak, dB			14	15	15	16
Front-to-Back Total Power at 180° ± 30°, dB	24	24	27	31	32	30
CPR at Boresight, dB	23	23	19	20	20	21
CPR at Sector, dB	6	7	7	2	2	13

Mechanical Specifications

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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	563 mm 22.165 in
Depth, packed	355 mm 13.976 in
Length, packed	2021 mm 79.567 in
Weight, gross	49.4 kg 108.908 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
UK-ROHS	Compliant/Exempted



Included Products

BSAMNT-3F	-	Mounting bracket for cylindrical pipe installations (60-115mm pipe diameter) for fix mechanical tilt applications.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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