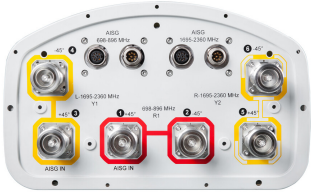


NHH-65A-R2B



6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One RET for low band and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector 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	7-16 DIN Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information

RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	2 female 2 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 3
Internal RET	High band (1) Low band (1)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	13 W

NHH-65A-R2B

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

Width 301 mm | 11.85 in

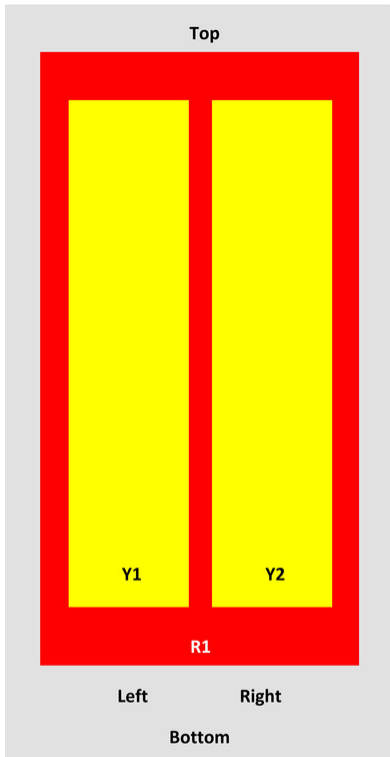
Depth 180 mm | 7.087 in

Length 1413 mm | 55.63 in

Net Weight, without mounting kit 15.9 kg | 35.053 lb

Array Layout

NHH



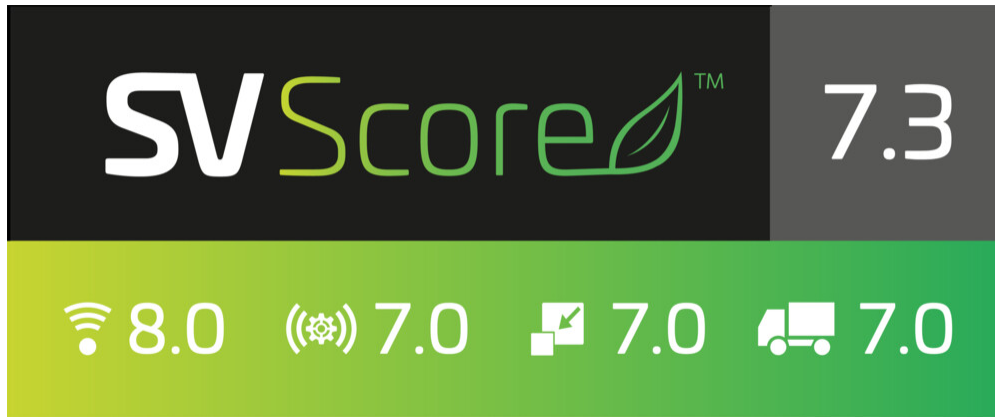
Array	Freq (MHz)	Coms	RET (SRET)	AISG RET UID
R1	698-896	1-2	1	ANXXXXXXXXXXXXX1
Y1	1695-2360	3-4	2	ANXXXXXXXXXXXXX2
Y2	1695-2360	5-6		

View from the front of the antenna

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

Logo Image

NHH-65A-R2B



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	1920–2200	2300–2360
Gain, dBi	13.4	13.5	16.4	16.5	17.1	17.5
Beamwidth, Horizontal, degrees	66.2	61	69	64	61	61
Beamwidth, Vertical, degrees	17.8	16.2	7.1	6.5	6.1	5.5
Beam Tilt, degrees	0–18	0–18	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	16	18	17	16	15
Front-to-Back Ratio at 180°, dB	29	26	33	32	30	32
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
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	250	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	2300–2360
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NHH-65A-R2B

Gain by all Beam Tilts, average, dBi	13.1	13.2	16.1	16.3	16.6	17.1
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.5	±0.4	±0.4	±0.6	±0.5
Gain by Beam Tilt, average, dBi	0° 13.3 9° 13.2 18° 13.8	0° 13.4 9° 13.4 18° 12.7	0° 16.0 5° 16.1 10° 16.0	0° 16.1 5° 16.3 10° 16.3	0° 16.4 5° 16.7 10° 16.4	0° 17.0 5° 17.2 10° 16.7
Beamwidth, Horizontal Tolerance, degrees	±2.8	±3.6	±3.9	±3.5	±6.6	±4.6
Beamwidth, Vertical Tolerance, degrees	±1.5	±1.3	±0.3	±0.4	±0.5	±0.3
USLS, beampeak to 20° above beampeak, dB	15	16	12	13	13	14
Front-to-Back Total Power at 180° ± 30°, dB	24	23	27	26	23	26
CPR at Boresight, dB	18	19	20	22	21	22
CPR at Sector, dB	10	5	12	9	5	2

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.19 m ² 2.045 ft ²
Effective Projective Area (EPA), lateral	0.16 m ² 1.722 ft ²
Mechanical Tilt Range	0°–18°
Wind Loading @ Velocity, frontal	206.0 N @ 150 km/h (46.3 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	169.0 N @ 150 km/h (38.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	396.0 N @ 150 km/h (89.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	208.0 N @ 150 km/h (46.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	380 mm 14.961 in
Depth, packed	295 mm 11.614 in
Length, packed	1537 mm 60.512 in
Weight, gross	26.5 kg 58.422 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

NHH-65A-R2B

ROHS Compliant/Exempted

UK-ROHS Compliant/Exempted



Included Products

- BSAMNT-3 – Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance