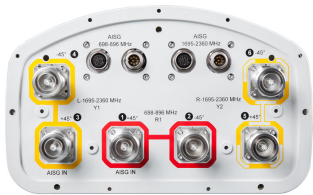


# NHH-65A-R2B



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, mid band	0
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

# NHH-65A-R2B

Power Consumption, normal conditions, maximum	13 W
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

Top

Y1

Y2

R1

Left

Right

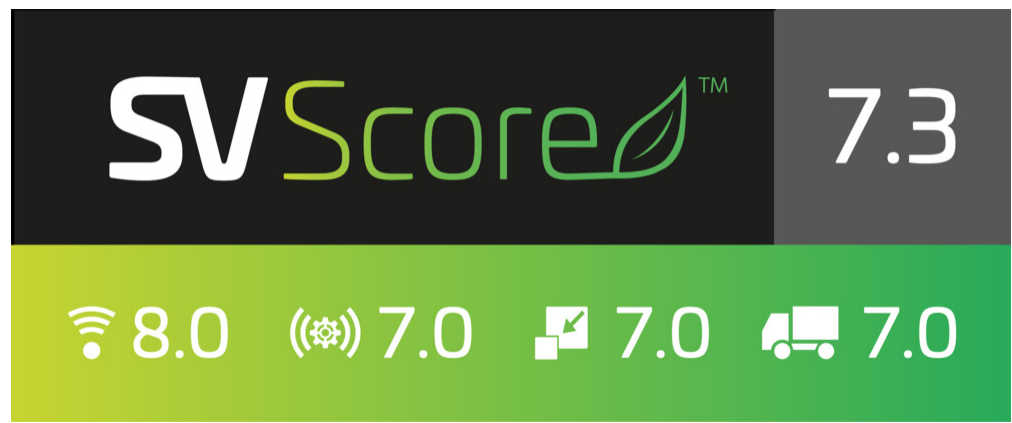
Bottom

Array	Freq (MHz)	Conns	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

## Mechanical Specifications

Effective Projective Area (EPA), frontal	0.19 m²   2.045 ft²
------------------------------------------	---------------------

# NHH-65A-R2B

Effective Projective Area (EPA), lateral	0.16 m²   1.722 ft²
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
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
------------------	-----------------------------------------------------------------