NHH-45A-R2B

6-port sector antenna, 2x 698–896 and 4x 1695–2360 MHz, 45° HPBW, 2x RETs and 2x SBTs. Both high bands share the same electrical tilt.

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- One LB RET and one HB RET. Both high bands are controlled by one RET to ensure same tilt level for 4x Rx or 4x MIMO
- Separate RS-485 RET input/output for low and high band

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	Copper | 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, low band	2
RF Connector Quantity, total	6

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
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

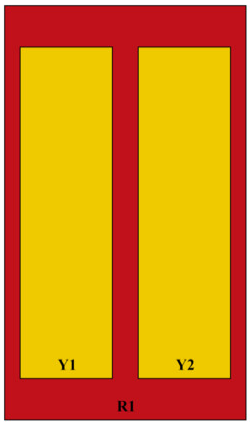
NHH-45A-R2B

Internal RET	High band (1) | Low band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	457 mm | 17.992 in
Depth	178 mm | 7.008 in
Length	1220 mm | 48.032 in
Net Weight, antenna only	21 kg | 46.297 lb

Array Layout

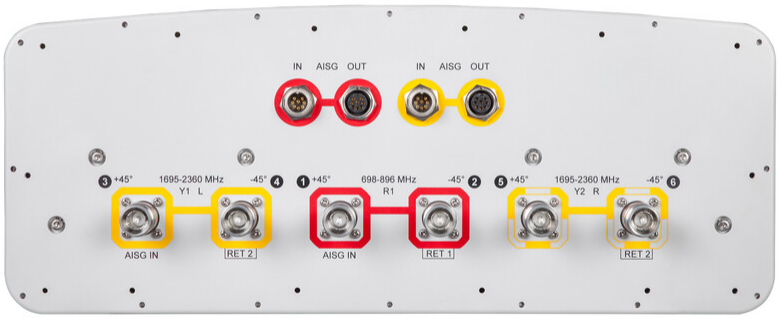


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxR1
Y1	1695-2360	3 - 4	2	AISG2	CPxxxxxxxxxxxxxxY1
Y2	1695-2360	5 - 6			

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

Port Configuration

NHH-45A-R2B



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	800 W @ 50 °C

Electrical Specifications

	R1	R1	Y1-Y2	Y1-Y2	Y1-Y2	Y1-Y2
Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
RF Port	1-2	1-2	3-6	3-6	3-6	3-6
Gain, dBi	15.5	16.2	18.3	19	19.2	20
Beamwidth, Horizontal, degrees	48	44	44	44	43	39
Beamwidth, Vertical, degrees	18.5	16.8	7.9	7.3	6.8	6
Beam Tilt, degrees	2–18	2–18	1–9	1–9	1–9	1–9
USLS (First Lobe), dB	16	17	17	16	15	15
Front-to-Back Ratio at 180°, dB	32	33	36	36	36	35
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	250	250	250	200

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain by all Beam Tilts, average, dBi	15.1	15.9	17.9	18.7	19	19.8
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.6	±0.4	±0.3	±0.4
Beamwidth, Horizontal Tolerance, degrees	±2	±3	±2	±1	±2	±2
Beamwidth, Vertical Tolerance, degrees	±1	±0.9	±0.3	±0.3	±0.5	±0.2
USLS, beampeak to 20° above beampeak, dB	17	22	12	13	14	15
Front-to-Back Total Power at 180° ± 30°, dB	24	24	27	29	30	30
CPR at Boresight, dB	24	25	15	18	19	20
CPR at Sector, dB	18	17	11	13	15	16

Mechanical Specifications

Wind Loading @ Velocity, frontal	677.0 N @ 150 km/h (152.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	135.0 N @ 150 km/h (30.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	677.0 N @ 150 km/h (152.2 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	595.0 N @ 150 km/h (133.8 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	1393 mm | 54.843 in
Weight, gross	32.1 kg | 70.768 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
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

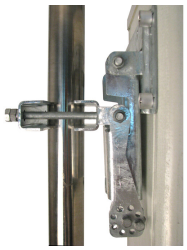
Included Products

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

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.

Product Classification

Product Type	Downtilt mounting kit

General Specifications

Application	Outdoor
Color	Silver

Dimensions

Compatible Diameter, maximum	115 mm | 4.528 in
Compatible Diameter, minimum	60 mm | 2.362 in
Weight, net	6.2 kg | 13.669 lb

Material Specifications

Material Type	Galvanized steel

Packaging and Weights

Included	Brackets | Hardware
Packaging quantity	1
Weight, gross	6.4 kg | 14.11 lb

Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant