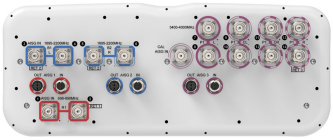
NHHS4-45B-R3B



14 Port Sector Antenna, 2x 698-896 MHz, 4x 1695-2200 MHz 45° HPBW, and 8x 3400-3550/3700-4000 MHz Beamformer, 3x RETs and 3x SBTs

- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- 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 LB RET, one MB RET and one HB RET. Both mid bands are controlled by one RET to ensure same tilt level for 4x Rx or 4x MIMO

General Specifications

Antenna Type	Sector- and beamforming
Band	Multiband
Calibration Connector Interface	4.3-10 Female
Calibration Connector Quantity	1
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	Fiberglass, UV resistant
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	14

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male

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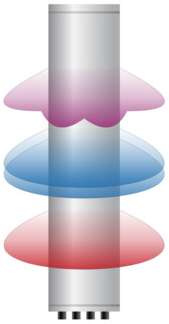
NHHS4-45B-R3B

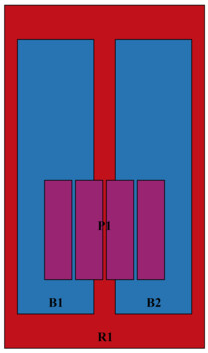
RET Interface, quantity	3 female | 3 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Cal Port | Port 1 | Port 3
Internal RET	High band (1) | Low band (1) | Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	1828 mm | 71.969 in
Net Weight, antenna only	32.6 kg | 71.871 lb

Array Layout





Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
R1	698-896	1 - 2	45°	1	AISG1	CPxxxxxxxxxxxxxxR1
B1	1695-2200	3 - 4	45°	2	AISG2	CPxxxxxxxxxxxxxxB1
B2	1695-2200	5 - 6	45°			
P1	3400-4000	7 - 14	BF°	3	AISG3	CPxxxxxxxxxxxxxxP1

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

Port Configuration

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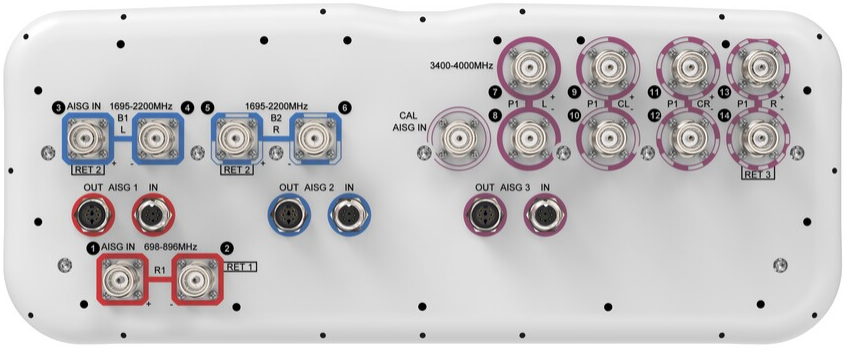
NHHS4-45B-R3B



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz | 3400 – 4000 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	1,040 W @ 50 °C

Electrical Specifications

	R1	R1	B1,B2	B1,B2	B1,B2	P1	P1
Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2200**	**3400–3550**	**3700–4000**
RF Port	1,2	1,2	3-6	3-6	3-6	7-14	7-14
Gain, dBi	16.9	17.3	18.9	19.3	20.2	16	17.5
Beamwidth, Horizontal, degrees	46	40	48	46	43	83	69
Beamwidth, Vertical, degrees	12.3	10.9	5.7	5.3	5	6.2	5.7
Beam Tilt, degrees	2–14	2–14	0–8	0–8	0–8	0–10	0–10
USLS (First Lobe), dB	19	16	17	18	19	14	14
Front-to-Back Ratio at 180°, dB	33	34	34	37	36	29	31
Coupling level, Amp, Antenna port to Cal port, dB						26	26
Coupling level, max Amp Δ, Antenna port to Cal port, dB						±2	±2
Coupler, max Amp Δ, Antenna port to Cal port, dB						0.9	0.9

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Coupler, max Phase Δ, Antenna port to Cal port, degrees						7	7
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25
Isolation, Co-polarization, dB						19	19
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	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-145	-145
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	75	75

Electrical Specifications, BASTA

Frequency Band, MHz	**698–806**	**806–896**	**1695–1880**	**1850–1990**	**1920–2200**	**3400–3550**	**3700–4000**
Gain by all Beam Tilts, average, dBi	16.6	17.1	18.6	19.1	19.7	15.3	16.6
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.5	±0.4	±0.4	±0.7	±0.9	±1
Beamwidth, Horizontal Tolerance, degrees	±2	±2	±2	±2	±4	±22	±26
Beamwidth, Vertical Tolerance, degrees	±0.7	±0.7	±0.2	±0.1	±0.3	±0.4	±0.3
Front-to-Back Total Power at 180° ± 30°, dB	26	25	28	28	28	22	23
CPR at Boresight, dB	25	28	18	20	21	14	15
CPR at Sector, dB						8	8
CPR at 10 dB Horizontal Beamwidth, dB	14	11	6	8	8		

Electrical Specifications, Broadcast 65°

Frequency Band, MHz	**3400–3550**	**3700–4000**
Gain, dBi	17.1	18.5
Beamwidth, Horizontal, degrees	65	65
Beamwidth, Vertical, degrees	6.2	5.7
Front-to-Back Total Power at 180° ± 30°, dB	25	26
USLS (First Lobe), dB	16	18

Electrical Specifications, Broadcast 45°

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Frequency Band, MHz	3400–3550	3700–4000
Beamwidth, Vertical, degrees	6.2	5.7
Front-to-Back Total Power at 180° ± 30°, dB	26	27
USLS (First Lobe), dB	16	18

Electrical Specifications, Service Beam

Frequency Band, MHz	3400–3550	3700–4000
Steered 0° Gain, dBi	20.4	21.7
Steered 0° Beamwidth, Horizontal, degrees	27	22
Steered 0° Front-to-Back Total Power at 180° ± 30°, dB	29	29
Steered 0° Horizontal Sidelobe, dB	13	13
Steered 0° USLS (First Lobe), dB	17	18
Steered 30° Gain, dBi	19.5	19.9
Steered 30° Beamwidth, Horizontal, degrees	30	30
Steered 30° Front-to-Back Total Power at 180° ± 30°, dB	28	28

Electrical Specifications, Soft Split

Frequency Band, MHz	3400–3550	3700–4000
Gain, dBi	19.3	20.2
Beamwidth, Horizontal, degrees	35	32
Front-to-Back Total Power at 180° ± 30°, dB	27	29
Horizontal Sidelobe, dB	14	16
USLS (First Lobe), dB	17	18

Mechanical Specifications

Wind Loading @ Velocity, frontal	622.0 N @ 150 km/h (139.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	188.0 N @ 150 km/h (42.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	746.0 N @ 150 km/h (167.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	428.0 N @ 150 km/h (96.2 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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NHHS4-45B-R3B

Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	309 mm | 12.165 in
Length, packed	2015 mm | 79.331 in
Weight, gross	46.1 kg | 101.633 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

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

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