

NHHSS-45B-R2BT4



10-port sector antenna, 2x 698–896, 4x 1695–2200 and 4x 3100–4200 MHz, 45° HPBW, 2x RETs and 2x SBTs

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable

General Specifications

Antenna Type	Sector
Band	Multiband
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	4
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

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
Internal RET	Low band (1) Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W

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Protocol 3GPP/AISG 2.0

Dimensions

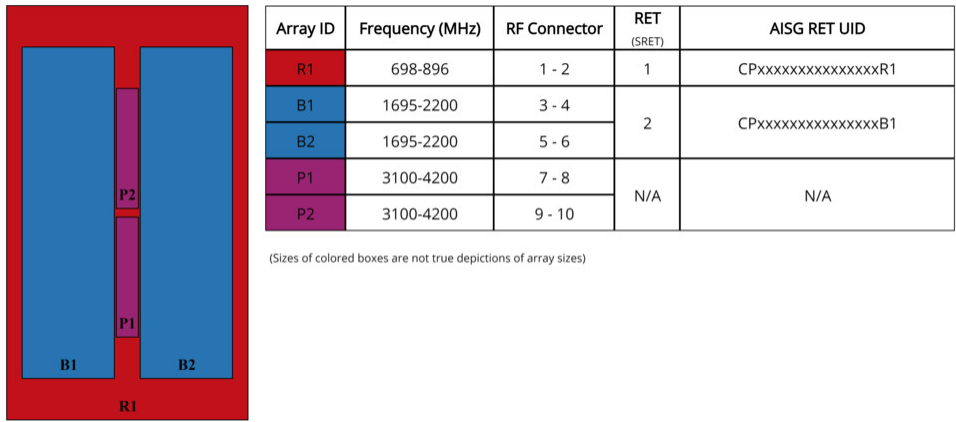
Width 457 mm | 17.992 in

Depth 178 mm | 7.008 in

Length 1828 mm | 71.969 in

Net Weight, antenna only 34.9 kg | 76.941 lb

Array Layout



Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2200 MHz 3100 – 4200 MHz 698 – 896 MHz
Polarization	±45°

Electrical Specifications

	R1	R1	B1,B2	B1,B2	B1,B2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200	3100–3550	3550–3700	3700–4200
RF Port	1,2	1,2	3-6	3-6	3-6	7-10	7-10	7-10
Gain, dBi	17	17.9	19.1	19.7	20.4	16.9	17.5	17.2
Gain at Mid Tilt, dBi	16.7	17.7	18.9	19.5	20	16.5	17.2	16.5
Beamwidth, Horizontal, degrees	45	40	44	42	41	49	43	40
Beamwidth, Vertical, degrees	12.2	10.8	5.8	5.4	5.1	9.7	9.1	8.5
Beam Tilt, degrees	2–14	2–14	0–8	0–8	0–8	4	4	4
USLS (First Lobe), dB	19	20	17	17	18	18	18	14
Front-to-Back Ratio at 180°, dB	31	35	34	33	33	31	32	26
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	31	32	31	28	28	28	29	23

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Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	28	28	28	28	28	28
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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	250	250	250	250	250	100	100	100

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,065.0 N @ 150 km/h (239.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	220.0 N @ 150 km/h (49.5 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,065.0 N @ 150 km/h (239.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	935.0 N @ 150 km/h (210.2 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	526 mm 20.709 in
Depth, packed	283 mm 11.142 in
Length, packed	1996 mm 78.583 in
Weight, gross	52.8 kg 116.404 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
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.
BSAMNT-M	– Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

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Performance Note Severe environmental conditions may degrade optimum performance