

NNH4-45B-HG-R3B



12-port Next Generation PerforMax™ Superior Coverage and Capacity sector antenna, 4x 698-896 and 8x 1695–2200 MHz, 45° HPBW, 6 ft, 3x RET

- Antenna optimized for higher gain with superior radiation efficiency
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- Best in class PIM immunity
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Internal SBT allows 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
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, mid band	8
RF Connector Quantity, low band	4
RF Connector Quantity, total	12

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	3 female 3 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 Port 5 Port 9
Internal RET	Low band (1) Mid band (2)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W

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Protocol 3GPP/AISG 2.0

Dimensions

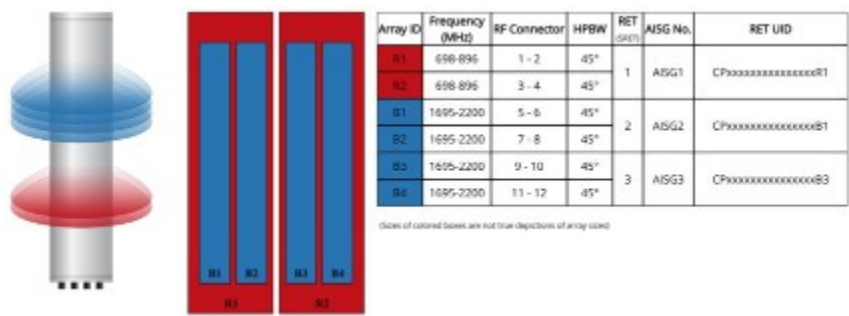
Width 749 mm | 29.488 in

Depth 197 mm | 7.756 in

Length 1848 mm | 72.756 in

Net Weight, without mounting kit 56 kg | 123.459 lb

Array Layout



Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2200 MHz | 698 – 896 MHz

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Polarization	±45°
Total Input Power, maximum	1,440 W

Electrical Specifications

	R1,R2	R1,R2	B1-B4	B1-B4	B1-B4
Frequency Band, MHz	698–806	806–896	1695–1880	1850–1990	1920–2200
RF Port	1-4	1-4	5-12	5-12	5-12
Gain, Maximum, dBi	16.9	17.5	20.1	20.6	20.9
Gain, dBi	16.2	16.9	19.1	19.7	20.1
Beamwidth, Horizontal, degrees	49	45	49	47	45
Beamwidth, Vertical, degrees	12.4	11.1	5.3	5	4.7
Beam Tilt, degrees	2–12	2–12	0–10	0–10	0–10
USLS (First Lobe), dB	18	17	15	16	17
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	27	31	32	36	35
CPR at Boresight, dB	15	14	16	20	18
Isolation, Cross Polarization, dB	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
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,768.0 N @ 150 km/h (397.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	191.0 N @ 150 km/h (42.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,768.0 N @ 150 km/h (397.5 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,768.0 N @ 150 km/h (397.5 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	915 mm 36.024 in
Depth, packed	357 mm 14.055 in
Length, packed	2438 mm 95.984 in
Weight, gross	80 kg 176.37 lb

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Regulatory Compliance/Certifications

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



Included Products

BSAMNT-9	– 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.
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* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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