

NN-45A-HG-R1B-V1



4-port Next Generation PerformMax™ sector antenna, 4x 698–896 MHz, 45° HPBW, 1x RET and 1x SBT

- Internal SBTs allow remote RET control from the radio over the RF jumper cable
- Antenna optimized for higher gain with superior radiation efficiency
- Powered by Andrew’s SEED® technology (Sustainable Energy Efficient Design)
- Best in class PIM immunity
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput

General Specifications

Antenna Type	Sector
Band	Single band
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, low band	4
RF Connector Quantity, total	4

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	1 female 1 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1
Internal RET	Low 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 (Single RET)

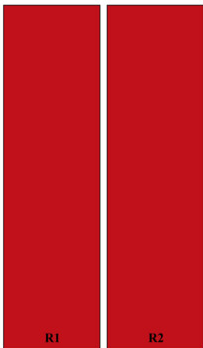
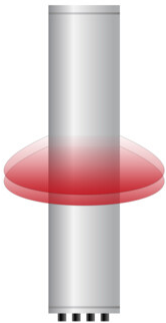
Dimensions

Width749 mm | 29.488 in

Depth197 mm | 7.756 in

Length1030 mm | 40.551 in

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxR1
R2	698-896	3 - 4					

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

Port Configuration

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Electrical Specifications

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

Electrical Specifications

	R1	R1
Frequency Band, MHz	698–806	806–896
RF Port	1-2	1-2
Gain, dBi	14	14.5
Beamwidth, Horizontal, degrees	47	42
Beamwidth, Vertical, degrees	22.2	20.3
Beam Tilt, degrees	2–18	2–18

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USLS (First Lobe), dB	15	15
Front-to-Back Ratio at 180°, dB	28	31
Isolation, Cross Polarization, dB	25	25
VSWR Return loss, dB	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,000.0 N @ 150 km/h (224.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	95.0 N @ 150 km/h (21.4 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,000.0 N @ 150 km/h (224.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	910 mm 35.827 in
Depth, packed	368 mm 14.488 in
Length, packed	1266 mm 49.843 in
Weight, gross	42.2 kg 93.035 lb

Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

Included Products

BSAMNT-4	–	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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