

# NN-33C-HG-R1B



4-port Next Generation PerforMax™ sector antenna, 4x 698–896 MHz, 33° HPBW, 1x RET

- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Antenna optimized for higher gain with superior radiation efficiency
- Best in class PIM immunity
- Internal SBT allows remote RET control from the radio over the RF jumper cable
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Interleaved dipole technology results into an attractive, low wind load mechanical package

## General Specifications

Antenna Type	Sector with internal RET and bias tee
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	Aluminum
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 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

## Dimensions

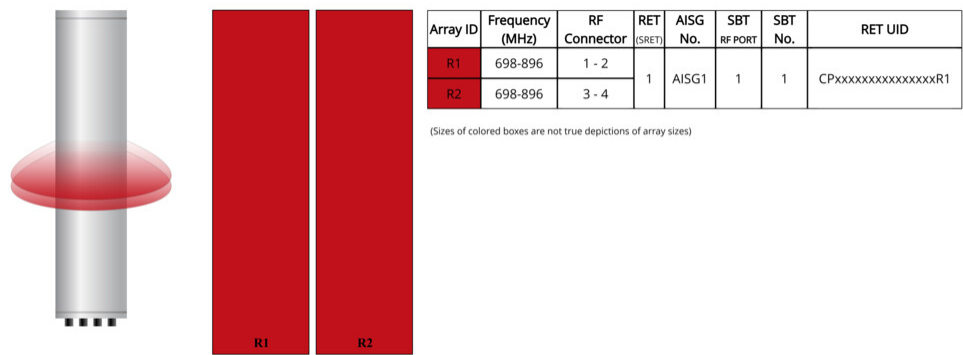
**Width**970 mm | 38.189 in

**Depth**235 mm | 9.252 in

**Length**2438 mm | 95.984 in

**Net Weight, without mounting kit**75 kg | 165.347 lb

## Array Layout



## Port Configuration



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## Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	600 W @ 50 °C

## Electrical Specifications

	R1,R2	R1,R2
Frequency Band, MHz	698–806	806–896
RF Port	1-4	1-4
Gain, Maximum, dBi	18.9	19.6
Gain, dBi	18.2	18.8
Beamwidth, Horizontal, degrees	35	32
Beamwidth, Vertical, degrees	9.1	8.2
Beam Tilt, degrees	0–10	0–10
USLS (First Lobe), dB	16	15
Front-to-Back Ratio at 180°, dB	29	33
CPR at Boresight, dB	25	27
Isolation, Cross Polarization, dB	25	25
Isolation, Inter-band, 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	3,022.0 N @ 150 km/h (679.4 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	922.0 N @ 150 km/h (207.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	3,022.0 N @ 150 km/h (679.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

## Packaging and Weights

Width, packed	1122 mm   44.173 in
Depth, packed	575 mm   22.638 in
Length, packed	2689 mm   105.866 in

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**Weight, gross** 117.2 kg | 258.381 lb

## Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

## Included Products

BSAMNT-8	–	Wide Profile Antenna Down tilt Mounting Kit for 3.0 - 4.5 in (75 - 115mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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