NN-85C-HG-R1B

4-port Next Generation PerforMax™ Superior Coverage and Capacity sector antenna, 4 x 698-896 MHz, 85° HPBW, 8 ft, 1x RET

- Ideal 4T4R low band antenna for use with an FD mMIMO antenna
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Best in class PIM immunity
- Internal SBT allows remote RET control from the radio over the RF jumper cable
- Antenna optimized for higher gain with superior radiation efficiency

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 Bias Tee	Port 1
Internal RET	Low band (1)
Power Consumption, active state, maximum	10 W

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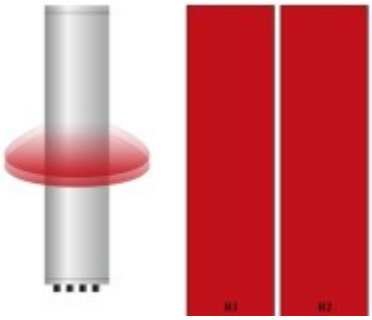
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	2438 mm | 95.984 in
Net Weight, without mounting kit	35.5 kg | 78.264 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET	AISG No.	SBT	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

Electrical Specifications

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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	16.2	16.9
Gain, dBi	15.9	16.5
Beamwidth, Horizontal, degrees	84	78
Beamwidth, Vertical, degrees	8.7	7.8
Beam Tilt, degrees	0–10	0–10
USLS (First Lobe), dB	15	15
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	27	27
CPR at Boresight, dB	18	19
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	865.0 N @ 150 km/h (194.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,037.0 N @ 150 km/h (233.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	595.0 N @ 150 km/h (133.8 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	309 mm | 12.165 in
Length, packed	2685 mm | 105.709 in

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Weight, gross	55.5 kg | 122.356 lb

Regulatory Compliance/Certifications

Agency	Classification
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.
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

Performance Note	Severe environmental conditions may degrade optimum performance