NN-45C-HG-R2BD

4-port Next Generation PerforMax™ sector antenna, 4 x 698-894 MHz, 45° HPBW, 2x RET

- Antenna optimized for higher gain with superior radiation efficiency
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Internal SBTs allow remote RET control from the radio over the RF jumper cable
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- The low band array is internally diplexed for an independent tilt at 700 MHz and 850 MHz
- Best in class PIM immunity
- Designed to reduce SUB 1 alarm triggers

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 (2)
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	749 mm	29.488 in
Depth	197 mm	7.756 in
Length	2438 mm	95.984 in
Net Weight, antenna only	72 kg	158.733 lb

Array Layout

Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-798	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxR1
R2	824-894	1 - 2	2	AISG1			CPxxxxxxxxxxxxxxxR2
R3	698-798	3 - 4	1	AISG1			CPxxxxxxxxxxxxxxxR1
R4	824-894	3 - 4	2	AISG1			CPxxxxxxxxxxxxxxxR2

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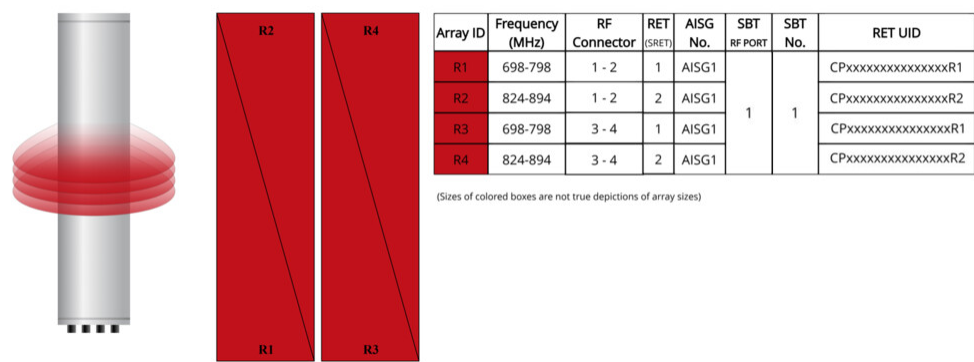
Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	698 − 798 MHz	824 − 894 MHz
Polarization	±45°

Electrical Specifications

	R1,R3	R2,R4
Frequency Band, MHz	698−798	824−894
RF Port	1-4	1-4
Gain, dBi	16.7	17.1
Beamwidth, Horizontal, degrees	47	45
Beamwidth, Vertical, degrees	9.1	8
Beam Tilt, degrees	0−10	0−10
USLS (First Lobe), dB	15	15
Front-to-Back Ratio at 180°, dB	30	32

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CPR at Boresight, dB	14	16
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	150	150

Mechanical Specifications

Wind Loading @ Velocity, frontal	2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	2,397.0 N @ 150 km/h (538.9 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	3201 mm | 126.024 in
Weight, gross	112 kg | 246.917 lb

Regulatory Compliance/Certifications

Agency	Classification
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.
BSAMNT-M9	–	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

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