NN-65B-HG-R2BD-V2

4-port Next Generation PerforMax™ Superior Coverage and Capacity sector antenna, 4x 698–894MHz, 65° HPBW, 6 ft, 2x RET

- Antenna optimized for higher gain with superior radiation efficiency
- 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
- The low band array is internally diplexed for an independent tilt at 700 MHz and 850 MHz
- Internal SBT allows remote RET control from the radio over the RF jumper cable
- Ideal 4T4R low band antenna for use with an FD mMIMO antenna

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	640 mm | 25.197 in
Depth	235 mm | 9.252 in
Length	1828 mm | 71.969 in
Net Weight, without mounting kit	53 kg | 116.845 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	CPxxxxxxxxxxxxxxR1
R2	824-894	1 - 2	2				CPxxxxxxxxxxxxxxR2
R3	698-798	3 - 4	1				CPxxxxxxxxxxxxxxR1
R4	824-894	3 - 4	2				CPxxxxxxxxxxxxxxR2

(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 – 894 MHz
Polarization	±45°
Total Input Power, maximum	400 W @ 50 °C

Electrical Specifications

	R1,R3	R2,R4
Frequency Band, MHz	**698–798**	**824–894**
RF Port	1-4	1-4
Gain, Maximum, dBi	14.8	15.2
Gain, dBi	14.5	14.8
Beamwidth, Horizontal, degrees	64	63
Beamwidth, Vertical, degrees	11.6	10.3
Beam Tilt, degrees	2–12	2–12
USLS (First Lobe), dB	15	15
Front-to-Back Ratio at 180°, dB	28	28
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	25	27
CPR at Boresight, dB	23	20

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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	715.0 N @ 150 km/h (160.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	206.0 N @ 150 km/h (46.3 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	911.0 N @ 150 km/h (204.8 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	446.0 N @ 150 km/h (100.3 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	752 mm | 29.606 in
Depth, packed	387 mm | 15.236 in
Length, packed	1982 mm | 78.032 in
Weight, gross	72.5 kg | 159.835 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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance