NN-65B-HG-R1B-V2



4-port Next Generation PerforMax[™] Superior Coverage and Capacity sector antenna, 4x 698–896 MHz, 65° HPBW, 6 ft, 1x 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
- 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 TypeRF connector inner conductor and body grounded to reflector and mounting

bracket

Performance Note Outdoor usage

Radome Material Fiberglass, UV resistant

Radiator MaterialAluminumReflector MaterialAluminum

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



Page 1 of 4

NN-65B-HG-R1B-V2

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
 41.5 kg | 91.492 lb

Array Layout



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

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

Port Configuration



Electrical Specifications

Impedance50 ohmOperating Frequency Band698 - 896 MHzPolarization±45°

Electrical Specifications

Total Input Power, maximum

	R1,R2	R1,R2
Frequency Band, MHz	698-806	806-896
RF Port	1-4	1-4
Gain, Maximum, dBi	16	16.3
Gain, dBi	15.6	15.9
Beamwidth, Horizontal, degrees	65	64
Beamwidth, Vertical, degrees	11.6	10.4
Beam Tilt, degrees	2-12	2-12
USLS (First Lobe), dB	15	15
Front-to-Back Ratio at 180°, dB	28	28

800 W @ 50 °C

Page 3 of 4



NN-65B-HG-R1B-V2

Front-to-Back Ratio, Copolarization 180° ± 30°, dB	25	27
CPR at Boresight, dB	24	21
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
 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
 57.5 kg | 126.766 lb

Regulatory Compliance/Certifications

AgencyClassificationUK-ROHSCompliant

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.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance

