## NN-65B-HG-R1B



4-port Next Generation PerforMax™ sector antenna, 4x 698–896, 65° HPBW, 1x RET and 1x SBT

- 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)
- Best in class PIM immunity
- Interleaved dipole technology results into an attractive, low wind load mechanical package

#### General Specifications

Antenna Type Sector

**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 | Low loss circuit board

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 (Single RET)

**Dimensions** 

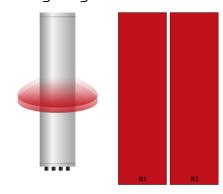
 Width
 498 mm | 19.606 in

 Depth
 197 mm | 7.756 in

 Length
 1848 mm | 72.756 in

 Net Weight, antenna only
 26.5 kg | 58.422 lb

### Array Layout



Array ID	Frequency (MHz)	1000	RET (SRET)		SBT RF PORT	SBT No.	RET UID	
R1	698-896	1 - 2		AISG1	1	1	CPxxxxxxxxxxxxxxR1	
R2	698-896	3 - 4					CPXXXXXXXXXXXXXXX	

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

### Port Configuration



### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 698 – 896 MHz

Polarization ±45°

**Total Input Power, maximum** 800 W @ 50 °C

### **Electrical Specifications**

	R1,R2	R1,R2
Frequency Band, MHz	698-806	806-896
RF Port	1-4	1-4
Gain, dBi	14.9	15.3
Beamwidth, Horizontal, degrees	69	67
Beamwidth, Vertical, degrees	11.3	9.8
Beam Tilt, degrees	2-12	2-12

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USLS (First Lobe), dB	15	15
Front-to-Back Ratio at 180°, dB	28	31
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
 629.0 N @ 150 km/h (141.4 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 191.0 N @ 150 km/h (42.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 755.0 N @ 150 km/h (169.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 433.0 N @ 150 km/h (97.3 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
 2035 mm | 80.118 in

 Weight, gross
 41 kg | 90.389 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.

### \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance

