

# NN-65A-HG-R1B-V1



## 4-port Next Generation PerforMax™ Superior Coverage and Capacity sector antenna, 4x 698–896 MHz, 65° HPBW, 4 ft, 1x RET



- Ideal 4T4R low band antenna for use with an FD mMIMO antenna
- 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 SBTs allow remote RET control from the radio over the RF jumper cable

## General Specifications

<b>Antenna Type</b>	Sector with internal RET and bias tee
<b>Band</b>	Single band
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Aluminum
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	4

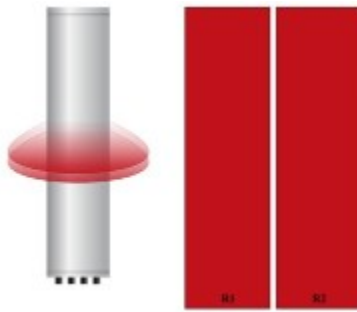
## Remote Electrical Tilt (RET) Information

<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1
<b>Internal RET</b>	Low band (1)
<b>Power Consumption, active state, maximum</b>	10 W

# NN-65A-HG-R1B-V1

<b>Power Consumption, idle state, maximum</b>	2 W
<b>Protocol</b>	3GPP/AISG 2.0
<b>Dimensions</b>	
<b>Width</b>	640 mm   25.197 in
<b>Depth</b>	235 mm   9.252 in
<b>Length</b>	1224 mm   48.189 in
<b>Net Weight, without mounting kit</b>	28 kg   61.729 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (dB)	AISG No.	SBT RF Port	SBT No.	RET UID
R1	698-896	1-2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxxR1
R2	698-896	3-4	1				

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

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	698 – 896 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	600 W @ 50 °C

# NN-65A-HG-R1B-V1

## Electrical Specifications

	<b>R1,R2</b>	<b>R1,R2</b>
<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>806–896</b>
<b>RF Port</b>	1-4	1-4
<b>Gain, Maximum, dBi</b>	14.4	14.6
<b>Gain, dBi</b>	14.1	14.3
<b>Beamwidth, Horizontal, degrees</b>	65	62
<b>Beamwidth, Vertical, degrees</b>	18.5	16.6
<b>Beam Tilt, degrees</b>	2–16	2–16
<b>USLS (First Lobe), dB</b>	15	15
<b>Front-to-Back Ratio, Copolarization 180° ± 30°, dB</b>	26	28
<b>CPR at Boresight, dB</b>	25	23
<b>Isolation, Cross Polarization, dB</b>	25	25
<b>Isolation, Inter-band, dB</b>	25	25
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	473.0 N @ 150 km/h (106.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	128.0 N @ 150 km/h (28.8 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	603.0 N @ 150 km/h (135.6 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	295.0 N @ 150 km/h (66.3 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	752 mm   29.606 in
<b>Depth, packed</b>	377 mm   14.843 in
<b>Length, packed</b>	1379 mm   54.291 in
<b>Weight, gross</b>	41 kg   90.389 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
UK-ROHS	Compliant

# NN-65A-HG-R1B-V1

---

## 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

# 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.

## Product Classification

**Product Type** Downtilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 115 mm | 4.528 in

**Compatible Diameter, minimum** 60 mm | 2.362 in

**Weight, net** 6.2 kg | 13.669 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 6.4 kg | 14.11 lb

## Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# BSAMNT-3

---

