

# NN-65A-HG-R1B-V2



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
- 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

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

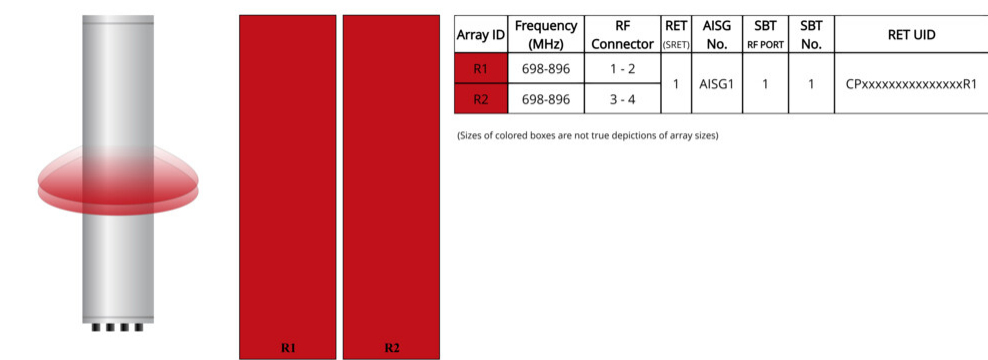
## Remote Electrical Tilt (RET) Information

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 (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W

# NN-65A-HG-R1B-V2

Protocol	3GPP/AISG 2.0
Dimensions	
Width	640 mm   25.197 in
Depth	235 mm   9.252 in
Length	1499 mm   59.016 in
Net Weight, without mounting kit	35 kg   77.162 lb

## Array Layout



## Port Configuration



## Electrical Specifications

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

# NN-65A-HG-R1B-V2

## Electrical Specifications

	R1,R2	R1,R2
Frequency Band, MHz	698–806	806–896
RF Port	1-4	1-4
Gain, Maximum, dBi	15.3	15.3
Gain, dBi	14.9	15.1
Beamwidth, Horizontal, degrees	65	62
Beamwidth, Vertical, degrees	14.3	12.9
Beam Tilt, degrees	2–16	2–16
USLS (First Lobe), dB	15	15
Front-to-Back Ratio at 180°, dB	30	29
CPR at Boresight, dB	18	18
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	579.0 N @ 150 km/h (130.2 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	162.0 N @ 150 km/h (36.4 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	739.0 N @ 150 km/h (166.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	361.0 N @ 150 km/h (81.2 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	1654 mm   65.118 in
Weight, gross	50.5 kg   111.333 lb

## Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

# NN-65A-HG-R1B-V2

---

## 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