NNSS-65B-HG-R2B

8-port Next Generation PerforMax™ Superior Coverage and Capacity sector antenna, 4x 698–896 and 4x 3300-4000 MHz, 65° HPBW, 6 ft, 2x RET

- 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
- Ideal 4T4R low band antenna for use with an FD mMIMO antenna

General Specifications

Antenna Type	Sector
Band	Multiband
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, high band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

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

©2026 ANDREW, an Amphenol company. All rights reserved. Amphenol and ANDREW are registered trademarks of Amphenol and/or its affiliates in the U.S. and other countries. All product names, trademarks and registered trademarks are property of their respective owners.
Revised: July 23, 2026

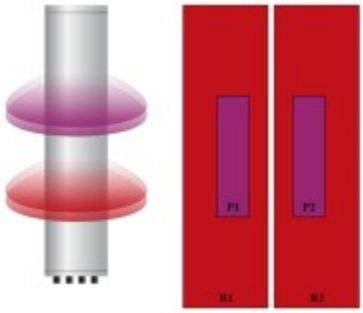
NNSS-65B-HG-R2B

Internal RET	High band (1) | Low band (1)
Power Consumption, active state, maximum	10 W
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, without mounting kit	30 kg | 66.139 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET	AISG No.	SBT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxR1
R2	698-896	3 - 4					
P1	3300-4000	5 - 6	2	AISG1	1	1	CPxxxxxxxxxxxxxxP1
P2	3300-4000	7 - 8					

sizes of colored boxes are not true depictions of array sizes

Port Configuration

©2026 ANDREW, an Amphenol company. All rights reserved. Amphenol and ANDREW are registered trademarks of Amphenol and/or its affiliates in the U.S. and other countries. All product names, trademarks and registered trademarks are property of their respective owners.
Revised: July 23, 2026

NNSS-65B-HG-R2B

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	3300 – 4000 MHz | 698 – 896 MHz
Polarization	±45°
Total Input Power, maximum	900 W @ 50 °C

Electrical Specifications

	R1,R2	R1,R2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	**698–806**	**806–896**	**3300–3550**	**3550–3700**	**3700–4000**
RF Port	1-4	1-4	5-8	5-8	5-8
Gain, Maximum, dBi	15.5	15.9	17.4	18	18
Gain, dBi	14.9	15.5	17	17.6	17.6
Beamwidth, Horizontal, degrees	73	68	66	63	61
Beamwidth, Vertical, degrees	11.3	10	7.5	7	6.8
Beam Tilt, degrees	2–12	2–12	0–10	0–10	0–10
USLS (First Lobe), dB	15	15	16	15	17

©2026 ANDREW, an Amphenol company. All rights reserved. Amphenol and ANDREW are registered trademarks of Amphenol and/or its affiliates in the U.S. and other countries. All product names, trademarks and registered trademarks are property of their respective owners.
Revised: July 23, 2026

Front-to-Back Ratio, Copolarization 180° ± 30°, dB	27	29	26	28	26
CPR at Boresight, dB	26	22	17	17	15
Isolation, Cross Polarization, dB	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	300	300	100	100	100

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	44.5 kg | 98.106 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.andrew.com/ProductCompliance
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

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. Mount Kit Weight is 6.2kg | 13.7 lb.

©2026 ANDREW, an Amphenol company. All rights reserved. Amphenol and ANDREW are registered trademarks of Amphenol and/or its affiliates in the U.S. and other countries. All product names, trademarks and registered trademarks are property of their respective owners.
Revised: July 23, 2026

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

©2026 ANDREW, an Amphenol company. All rights reserved. Amphenol and ANDREW are registered trademarks of Amphenol and/or its affiliates in the U.S. and other countries. All product names, trademarks and registered trademarks are property of their respective owners.
Revised: July 23, 2026