NNSS-65B-HG-R2B

8-port Next Generation PerforMax™ sector antenna, 4x 698–896 and 4x 3300-4000 MHz, 65° HPBW, 2x RETs

- 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
- Designed to reduce SUB 1 alarm triggers

General Specifications

Antenna Type	Sector with internal RET and bias tee
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
Internal RET	High band (1) | Low band (1)

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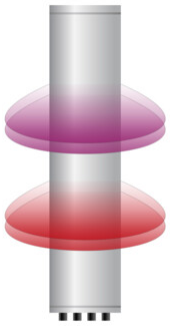
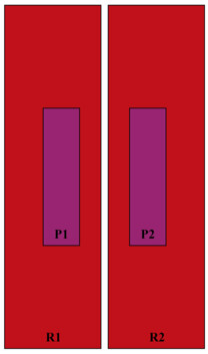
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Single RET)

Dimensions

Width	498 mm | 19.606 in
Depth	197 mm | 7.756 in
Length	1848 mm | 72.756 in
Net Weight, antenna only	30 kg | 66.139 lb

Array Layout





Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxR1
R2	698-896	3 - 4					
P1	3300-4000	5 - 6	2	AISG1	1	1	CPxxxxxxxxxxxxxxxP1
P2	3300-4000	7 - 8					

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

Port Configuration

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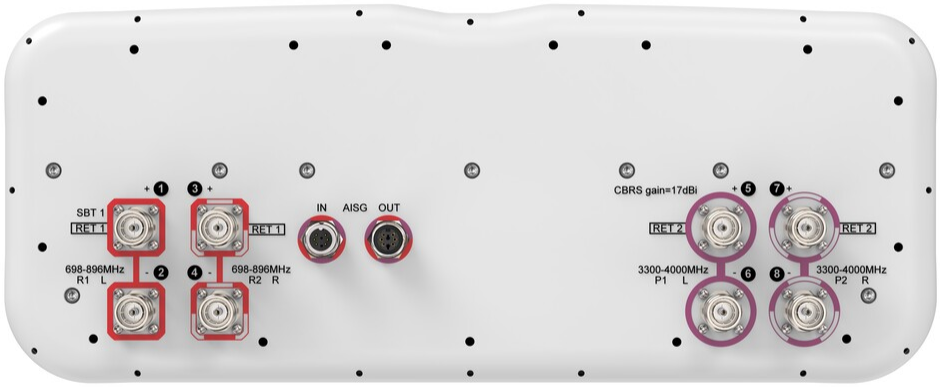

Electrical Specifications

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, 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

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USLS (First Lobe), dB	15	15	16	15	17
Front-to-Back Ratio at 180°, dB	28	31	29	30	29
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**
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