NHHSS-55C-HG-R3B



10-port Next Generation PerforMax[™] Sector Antenna, 2x 698–896, 4x 1695–2200 and 4x 3100-4000 MHz, 55° HPBW, 3x RETs and 2x SBTs

- Designed to reduce SUB 1 alarm triggers with pattern consistency between low band, mid band and high band
- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Interleaved dipole technology results into an attractive, low wind load mechanical package
- Internal SBTs allow remote RET control from the radio over the RF jumper cable
- Antenna optimized for higher gain with superior radiation efficiency
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Best in class PIM immunity
- Ideal for deploying low band, mid-band and CBRS/C-Band in flagpoles and concealment solutions

General Specifications

Antenna Type Sector

Band Multiband

Color Light Gray (RAL 7035)

Grounding TypeRF 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 LocationBottom

RF Connector Quantity, high band 4
RF Connector Quantity, mid band 4
RF Connector Quantity, low band 2
RF Connector Quantity, total 10

Remote Electrical Tilt (RET) Information

RET Hardware CommRET v2

RET Interface 8-pin DIN Female | 8-pin DIN Male

RET Interface, quantity 2 female | 2 male

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Page 1 of 4

NHHSS-55C-HG-R3B

Input Voltage 10-30 Vdc

Internal Bias Tee Port 1 | Port 3

Internal RET High band (1) | Low band (1) | Mid band (1)

Power Consumption, active state, maximum $10~\mathrm{W}$ Power Consumption, idle state, maximum $2~\mathrm{W}$

Protocol 3GPP/AISG 2.0 (Single RET)

Dimensions

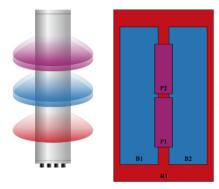
 Width
 395 mm | 15.551 in

 Depth
 228 mm | 8.976 in

 Length
 2438 mm | 95.984 in

 Net Weight, antenna only
 36 kg | 79.366 lb

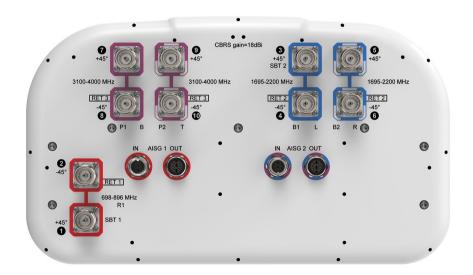
Array Layout



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	CPxxxxxxxxxxxxxxxxxx1		
B1	1695-2200	3 - 4	2	AISG2	3	2	CPxxxxxxxxxxxxxxx		
B2	1695-2200	5 - 6	_						
P1	3100-4000	7 - 8	,	AISG2	3	2	CPxxxxxxxxxxxxxxxx		
P2	3100-4000	9 - 10	3						

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

Port Configuration



Electrical Specifications

Impedance 50 ohm

Operating Frequency Band 1695 – 2200 MHz | 3100 – 4000 MHz | 698 – 896 MHz

Polarization ±45°

Electrical Specifications

	R1	R1	B1,B2	B1,B2	B1,B2	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200	3100-3550	3550-3700	3700-4000
RF Port	1,2	1,2	3,4,5,6	3,4,5,6	3,4,5,6	7,8,9,10	7,8,9,10	7,8,9,10
Gain, dBi	17.2	17.1	18.9	19.2	19.3	16.9	17.1	17.2
Beamwidth, Horizontal, degrees	58	56	58	58	57	65	55	54
Beamwidth, Vertical, degrees	8.8	7.8	5.1	4.8	4.7	5.9	5.4	5.2
Beam Tilt, degrees	0-11	0-11	0-7	0-7	0-7	0-10	0-10	0-10
USLS (First Lobe), dB	16	17	16	16	16	15	16	16
Front-to-Back Ratio at 180°, dB	27	30	27	28	30	30	29	28

Page 3 of 4



NHHSS-55C-HG-R3B

CPR at Boresight, dB Isolation, Cross Polarization, dB	20 25	17 25	22 25	24 25	21 25	15 25	15 25	16 25
VSWR Return loss, dB PIM, 3rd Order, 2 x 20 W, dBc	1.5 14.0	1.5 14.0 -153	1.5 14.0 -153	1.5 14.0 -153	1.5 14.0 -153	1.5 14.0 -145	1.5 14.0 -145	1.5 14.0 -145
Input Power per Port at 50°C, maximum, watts	300	300	250	250	250	100	100	100

Mechanical Specifications

 Wind Loading @ Velocity, frontal
 382.0 N @ 150 km/h (85.9 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 346.0 N @ 150 km/h (77.8 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 768.0 N @ 150 km/h (172.7 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 437.0 N @ 150 km/h (98.2 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

Packaging and Weights

 Width, packed
 505 mm | 19.882 in

 Depth, packed
 386 mm | 15.197 in

 Length, packed
 2570 mm | 101.181 in

 Weight, gross
 51.5 kg | 113.538 lb

Regulatory Compliance/Certifications

AgencyClassificationUK-ROHSCompliant

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

