NHHSS-45C-HG-R3B

10-port Next Generation PerforMax™ sector antenna, 2x 698–896, 4x 1695–2200 MHz and 4x 3100-4000, 45° HPBW, 3x RETs and 2x SBTs

- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Antenna optimized for higher gain with superior radiation efficiency
- 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
- 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 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, 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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Input Voltage	10–30 Vdc
Internal RET	High band (1) | Low band (1) | Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	457 mm | 17.992 in
Depth	178 mm | 7.008 in
Length	2437 mm | 95.945 in
Net Weight, antenna only	41.5 kg | 91.492 lb

Array Layout
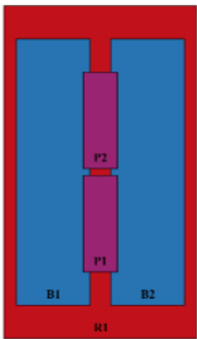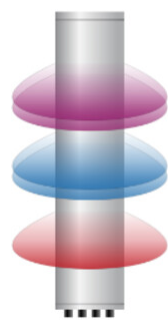
Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-896	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxR1
B1	1695-2200	3 - 4	2	AISG2	3	2	CPxxxxxxxxxxxxxxxB1
B2	1695-2200	5 - 6					
P1	3100-4000	7 - 8	3	AISG2	3	2	CPxxxxxxxxxxxxxxxP1
P2	3100-4000	9 - 10					

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

Port Configuration

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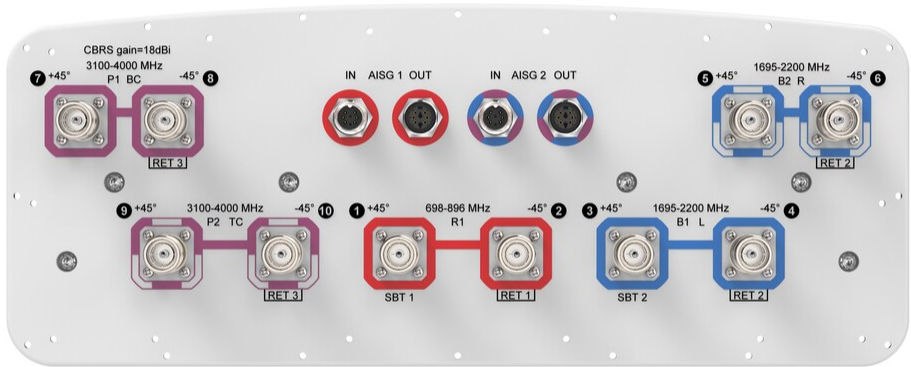
Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 − 2200 MHz | 3100 − 4000 MHz | 698 − 896 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

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
Beamwidth, Horizontal, degrees	45	41	45	44	42	44	45	48
Beamwidth, Vertical, degrees	9.2	8.4	5.2	4.9	4.6	9.9	9.4	8.8
Beam Tilt, degrees	0−10	0−10	0−8	0−8	0−8	2−10	2−10	2−10
USLS (First Lobe), dB	15	19	15	16	16	18	17	15
Front-to-Back Ratio at 180°, dB	30	35	35	35	35	32	33	29
CPR at Boresight, dB	17	15	19	24	18	15	16	15
Isolation, Cross Polarization,	25	25	25	25	25	25	25	25

dB

Isolation, Inter-band, dB	25	25	25	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	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	250	250	250	250	250	100	100	100

Mechanical Specifications

Wind Loading @ Velocity, frontal	1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	315.0 N @ 150 km/h (70.8 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,485.0 N @ 150 km/h (333.8 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,304.0 N @ 150 km/h (293.2 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	526 mm | 20.709 in
Depth, packed	283 mm | 11.142 in
Length, packed	2604 mm | 102.52 in
Weight, gross	60.5 kg | 133.38 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.
BSAMNT-M	–	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

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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 www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

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BSAMNT-3

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BSAMNT-M

Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor 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	4.5 kg	9.921 lb

Material Specifications

Material Type	Galvanized steel

Packaging and Weights

Included	Brackets	Hardware
Packaging quantity	1

Regulatory Compliance/Certifications

Agency	Classification
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 www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

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