

NN-85C-HG-R2BD



4-port Next Generation PerforMax™ Superior Coverage and Capacity sector antenna, 4 x 698-894 MHz, 85° HPBW, 8 ft, 2x RETs



- Ideal 4T4R low band antenna for use with an FD mMIMO antenna
- Antenna optimized for higher gain with improved 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 SBT allows remote RET control from the radio over the RF jumper cable
- The low band array is internally diplexed for an independent tilt at 700 MHz and 850 MHz

General Specifications

Antenna Type	Sector
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 (2)
Power Consumption, active state, maximum	10 W

NN-85C-HG-R2BD

Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0
Dimensions	
Width	498 mm 19.606 in
Depth	197 mm 7.756 in
Length	2438 mm 95.984 in
Net Weight, without mounting kit	51 kg 112.436 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (RET)	AISG No.	SBT RF PORT	SBT No.	RET UID
R1	698-798	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxxR1
R2	824-894	1 - 2	2				CPxxxxxxxxxxxxxxxxR2
R3	698-798	3 - 4	1				CPxxxxxxxxxxxxxxxxR1
R4	824-894	3 - 4	2				CPxxxxxxxxxxxxxxxxR2

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

Port Configuration



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	698 – 798 MHz 824 – 894 MHz
Polarization	±45°

NN-85C-HG-R2BD

Electrical Specifications

	R1,R3	R2,R4
Frequency Band, MHz	698–798	824–894
RF Port	1-4	1-4
Gain, Maximum, dBi	15.2	15.8
Gain, dBi	14.9	15.5
Beamwidth, Horizontal, degrees	84	78
Beamwidth, Vertical, degrees	8.6	7.6
Beam Tilt, degrees	0–10	0–10
USLS (First Lobe), dB	15	15
Front-to-Back Ratio at 180°, dB	35	36
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	25	26
CPR at Boresight, dB	18	19
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	150	150

Mechanical Specifications

Wind Loading @ Velocity, frontal	865.0 N @ 150 km/h (194.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	1,037.0 N @ 150 km/h (233.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	595.0 N @ 150 km/h (133.8 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	2685 mm 105.709 in
Weight, gross	71 kg 156.528 lb

Regulatory Compliance/Certifications

Agency	Classification
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NN-85C-HG-R2BD

UK-ROHS

Compliant

Included Products

- BSAMNT-4 – 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-M4 – 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

BSAMNT-4



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 6.5 kg | 14.33 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



BSAMNT-M4



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 4.6 kg | 10.141 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

