

# 2NN-33C-HG-R2B



## 8-port Next Generation PerformMax™ Superior Coverage and Capacity multibeam antenna, 8x 698–894 MHz, 33° HPBW, 8ft, 2x RET

- Ideal 4T4R low band antenna for use with an FD mMIMO antenna
- Antenna optimized for higher gain with superior 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

## General Specifications

<b>Antenna Type</b>	Multi-beam
<b>Band</b>	Single band
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, low band</b>	8

## Remote Electrical Tilt (RET) Information

<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1   Port 5
<b>Internal RET</b>	Low band (2)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W

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**Protocol** 3GPP/AISG 2.0 (Single RET)

## Dimensions

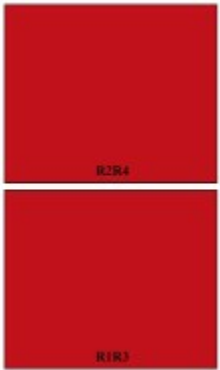
**Width** 749 mm | 29.488 in

**Depth** 197 mm | 7.756 in

**Length** 2438 mm | 95.984 in

**Net Weight, without mounting kit** 61.8 kg | 136.246 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SAET)	AISG No.	SBT # of ports	SBT No.	RET UID
R1	698-894	1 - 2	1	AISG1	1	1	CPxxxxxxxxxxxxxxxxR1
R2	698-894	3 - 4					
R3	698-894	5 - 6	2	AISG2	5	2	CPxxxxxxxxxxxxxxxxR3
R4	698-894	7 - 8					

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

## Port Configuration



## Electrical Specifications

**Impedance** 50 ohm

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<b>Operating Frequency Band</b>	698 – 894 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,000 W

## Electrical Specifications

	<b>R1-R4</b>	<b>R1-R4</b>
<b>Frequency Band, MHz</b>	<b>698–798</b>	<b>824–894</b>
<b>RF Port</b>	1-8	1-8
<b>Gain, Maximum, dBi</b>	16.8	17.5
<b>Gain, dBi</b>	16.3	17.2
<b>Beam Centers, Horizontal, degrees</b>	±27	±27
<b>Beamwidth, Horizontal, degrees</b>	33	30
<b>Beamwidth, Vertical, degrees</b>	18.9	16.9
<b>Beam Tilt, degrees</b>	2–16	2–16
<b>Horizontal Sidelobe, dB</b>	20	21
<b>USLS (First Lobe), dB</b>	17	18
<b>Front-to-Back Ratio, Copolarization 180° ± 30°, dB</b>	27	33
<b>CPR at Boresight, dB</b>	21	22
<b>Isolation, Cross Polarization, dB</b>	25	25
<b>Isolation, Beam to Beam, dB</b>	17	17
<b>VSWR   Return loss, dB</b>	1.5   14.0	1.5   14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153
<b>Input Power per Port, maximum, watts</b>	200	200

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	2,397.0 N @ 150 km/h (538.9 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	915 mm   36.024 in
<b>Depth, packed</b>	357 mm   14.055 in

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**Length, packed** 3202 mm | 126.063 in

**Weight, gross** 98.4 kg | 216.935 lb

## Regulatory Compliance/Certifications

Agency	Classification
UK-ROHS	Compliant

## Included Products

- BSAMNT-9 – 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-M9 – 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-9



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

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 9.7 kg | 21.385 lb

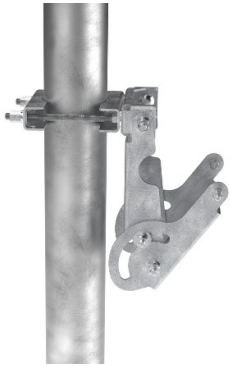
## Regulatory Compliance/Certifications

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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



# BSAMNT-M9

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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

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 7.5 kg | 16.535 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 <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant

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UK-ROHS

Compliant

