

# NN-33C-HG-R1B



4-port Next Generation PerforMax™ sector antenna, 4x 698–896 MHz, 33° HPBW, 1x RET

- Superior patterns for enhanced interference mitigation resulting in improved SINR, higher throughput, and more capacity
- Antenna optimized for higher gain with superior radiation efficiency
- Best in class PIM immunity
- Internal SBT allows remote RET control from the radio over the RF jumper cable
- Powered by Andrew's SEED® technology (Sustainable Energy Efficient Design)
- Interleaved dipole technology results into an attractive, low wind load mechanical package

## General Specifications

|                                 |                                                                                  |
|---------------------------------|----------------------------------------------------------------------------------|
| Antenna Type                    | Sector with internal RET and bias tee                                            |
| 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 RET                             | Low band (1)                      |
| Power Consumption, active state, maximum | 10 W                              |
| Power Consumption, idle state, maximum   | 2 W                               |

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**Protocol**3GPP/AISG 2.0

## Dimensions

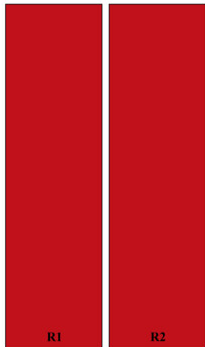
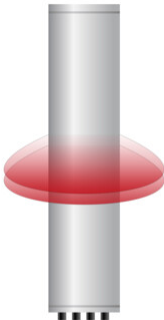
**Width**970 mm | 38.189 in

**Depth**235 mm | 9.252 in

**Length**2438 mm | 95.984 in

**Net Weight, without mounting kit**75 kg | 165.347 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       | CPxxxxxxxxxxxxxxR1 |
| R2       | 698-896         | 3 - 4        |            |          |             |         |                    |

(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   | 698 – 896 MHz |
| Polarization               | ±45°          |
| Total Input Power, maximum | 600 W @ 50 °C |

## Electrical Specifications

|                                              | R1,R2      | R1,R2      |
|----------------------------------------------|------------|------------|
| Frequency Band, MHz                          | 698–806    | 806–896    |
| RF Port                                      | 1-4        | 1-4        |
| Gain, Maximum, dBi                           | 18.9       | 19.6       |
| Gain, dBi                                    | 18.2       | 18.8       |
| Beamwidth, Horizontal, degrees               | 35         | 32         |
| Beamwidth, Vertical, degrees                 | 9.1        | 8.2        |
| Beam Tilt, degrees                           | 0–10       | 0–10       |
| USLS (First Lobe), dB                        | 16         | 15         |
| Front-to-Back Ratio at 180°, dB              | 29         | 33         |
| CPR at Boresight, dB                         | 25         | 27         |
| 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 | 300        | 300        |

## Mechanical Specifications

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| Wind Loading @ Velocity, frontal | 3,022.0 N @ 150 km/h (679.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 922.0 N @ 150 km/h (207.3 lbf @ 150 km/h)   |
| Wind Loading @ Velocity, rear    | 3,022.0 N @ 150 km/h (679.4 lbf @ 150 km/h) |
| Wind Speed, maximum              | 241 km/h (150 mph)                          |

## Packaging and Weights

|                |                      |
|----------------|----------------------|
| Width, packed  | 1122 mm   44.173 in  |
| Depth, packed  | 575 mm   22.638 in   |
| Length, packed | 2689 mm   105.866 in |

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**Weight, gross** 117.2 kg | 258.381 lb

## Regulatory Compliance/Certifications

| Agency  | Classification |
|---------|----------------|
| UK-ROHS | Compliant      |

## Included Products

|          |   |                                                                                                                                                                  |
|----------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BSAMNT-8 | – | Wide Profile Antenna Down tilt Mounting Kit for 3.0 - 4.5 in (75 - 115mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set. |
|----------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## \* Footnotes

|                         |                                                                 |
|-------------------------|-----------------------------------------------------------------|
| <b>Performance Note</b> | Severe environmental conditions may degrade optimum performance |
|-------------------------|-----------------------------------------------------------------|

# BSAMNT-8



Wide Profile Antenna Down tilt Mounting Kit for 3.0 - 4.5 in (75 - 115mm) 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** 114.3 mm | 4.5 in  
**Compatible Diameter, minimum** 61 mm | 2.402 in  
**Weight, net** 6 kg | 13.228 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware  
**Packaging quantity** 1  
**Weight, gross** 6.2 kg | 13.669 lb

## Regulatory Compliance/Certifications

| Agency        | Classification                                                                 |
|---------------|--------------------------------------------------------------------------------|
| CE            | Compliant with the relevant CE product directives                              |
| CHINA-ROHS    | Above maximum concentration value                                              |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| ROHS          | Compliant/Exempted                                                             |
| UK-ROHS       | Compliant/Exempted                                                             |

# BSAMNT-8

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