

# RVV-33B-R3



6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 33° HPBW, 3x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration

## 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   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| Radome Material                 | Fiberglass, UV resistant   |
| Reflector Material              | Aluminum   |
| RF Connector Interface          | 4.3-10 Female  |
| RF Connector Location           | Bottom   |
| RF Connector Quantity, mid band | 4  |
| RF Connector Quantity, low band | 2  |
| RF Connector Quantity, total    | 6  |

## Remote Electrical Tilt (RET) Information

|  |                                   |
|--|-----------------------------------|
| 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)   Mid band (2)       |
| Power Consumption, active state, maximum | 13 W                              |
| Power Consumption, idle state, maximum   | 2 W                               |
| Protocol                                 | 3GPP/AISG 2.0 (Single RET)        |

## Dimensions

|       |                    |
|-------|--------------------|
| Width | 640 mm   25.197 in |
| Depth | 235 mm   9.252 in  |

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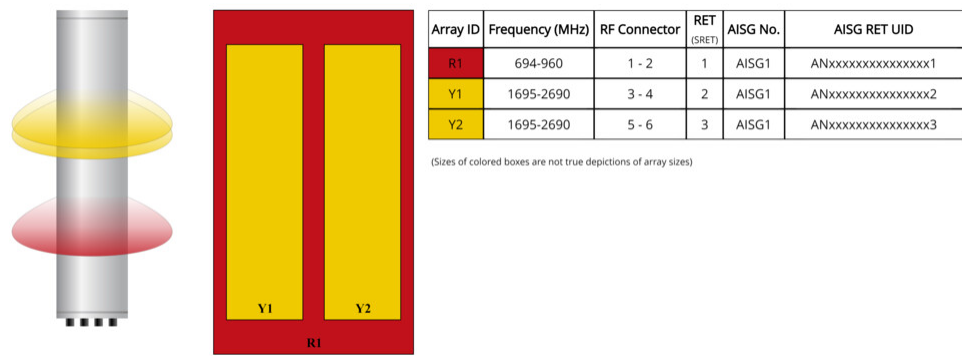
Length

1830 mm | 72.047 in

Net Weight, antenna only

44 kg | 97.003 lb

## Array Layout



## Port Configuration



## Electrical Specifications

Impedance

50 ohm

Operating Frequency Band

1695 – 2690 MHz | 694 – 960 MHz

Polarization

±45°

Total Input Power, maximum

900 W @ 50 °C

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## Electrical Specifications

|  | R1         | R1         | R1         | Y1,Y2      | Y1,Y2      | Y1,Y2      | Y1,Y2      |
|--|------------|------------|------------|------------|------------|------------|------------|
| Frequency Band, MHz                          | 698–806    | 790–896    | 890–960    | 1695–1990  | 1920–2300  | 2300–2500  | 2490–2690  |
| RF Port                                      | 1,2        | 1,2        | 1,2        | 3,4,5,6    | 3,4,5,6    | 3,4,5,6    | 3,4,5,6    |
| Gain at Mid Tilt, dBi                        | 17.5       | 18.2       | 18.6       | 19.8       | 20.5       | 21.3       | 21.3       |
| Beamwidth, Horizontal, degrees               | 36         | 32         | 30         | 34         | 33         | 28         | 26         |
| Beamwidth, Vertical, degrees                 | 12.4       | 11.2       | 10.5       | 5.6        | 5          | 4.5        | 4.2        |
| Beam Tilt, degrees                           | 2–13       | 2–13       | 2–13       | 2–12       | 2–12       | 2–12       | 2–12       |
| USLS (First Lobe), dB                        | 20         | 20         | 20         | 19         | 20         | 17         | 18         |
| Front-to-Back Ratio at 180°, dB              | 33         | 36         | 35         | 35         | 35         | 34         | 35         |
| CPR at Boresight, dB                         | 20         | 19         | 18         | 20         | 20         | 20         | 22         |
| Isolation, Cross Polarization, dB            | 28         | 26         | 26         | 28         | 28         | 28         | 28         |
| Isolation, Inter-band, dB                    | 30         | 30         | 30         | 30         | 30         | 30         | 30         |
| 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 |
| PIM, 3rd Order, 2 x 20 W, dBc                | -150       | -150       | -150       | -150       | -150       | -150       | -150       |
| Input Power per Port at 50°C, maximum, watts | 300        | 300        | 300        | 200        | 200        | 200        | 200        |

## Mechanical Specifications

|                                  |   |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 764.0 N @ 150 km/h (171.8 lbf @ 150 km/h)   |
| Wind Loading @ Velocity, lateral | 254.0 N @ 150 km/h (57.1 lbf @ 150 km/h)    |
| Wind Loading @ Velocity, maximum | 1,148.0 N @ 150 km/h (258.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 785.0 N @ 150 km/h (176.5 lbf @ 150 km/h)   |
| Wind Speed, maximum              | 241.4 km/h (150 mph)                        |

## Packaging and Weights

|                |                      |
|----------------|----------------------|
| Width, packed  | 752 mm   29.606 in   |
| Depth, packed  | 387 mm   15.236 in   |
| Length, packed | 1982 mm   78.032 in  |
| Weight, gross  | 66.4 kg   146.387 lb |

## Regulatory Compliance/Certifications

# RVV-33B-R3

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| Agency     | Classification                    |
|------------|-----------------------------------|
| CHINA-ROHS | Above maximum concentration value |
| ROHS       | Compliant/Exempted                |
| 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 |
|------------------|---|

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



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

