# RRVV2VV-6533B-R8

16-port sector/multibeam antenna 4x 694–960 MHz, 4x 1695-2690 MHz 65° HPBW and 8x 1710–2690 MHz 2x 2-Beam 33°HPBW, 8x RET

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

## General Specifications

| | |
|---|---|
| **Antenna Type** | DualPol® multibeam |
| **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** | Low loss circuit board |
| **Reflector Material** | Aluminum |
| **RF Connector Interface** | 4.3-10 Female |
| **RF Connector Location** | Bottom |
| **RF Connector Quantity, high band** | 12 |
| **RF Connector Quantity, mid band** | 0 |
| **RF Connector Quantity, low band** | 4 |
| **RF Connector Quantity, total** | 16 |

## 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 |
| **Input Voltage** | 10–30 Vdc |
| **Internal RET** | High band (6) \| Low band (2) |
| **Power Consumption, active state, maximum** | 8 W |
| **Power Consumption, idle state, maximum** | 1 W |
| **Protocol** | 3GPP/AISG 2.0 (Single RET) |

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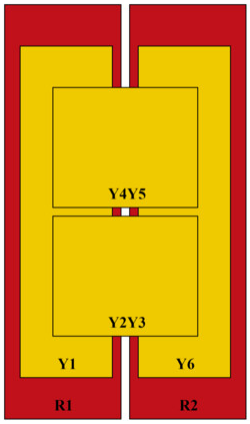
## Dimensions

| | |
|---|---|
| **Width** | 498 mm \| 19.606 in |
| **Depth** | 197 mm \| 7.756 in |
| **Length** | 2100 mm \| 82.677 in |
| **Net Weight, antenna only** | 46 kg \| 101.413 lb |

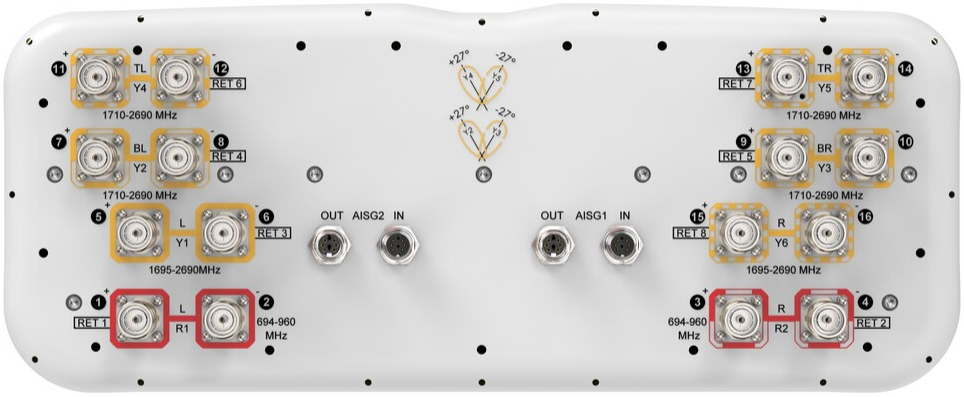
## Array Layout




| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|---|---|---|---|---|---|
| R1 | 694-960 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3 - 4 | 2 | AISG1 | CPxxxxxxxxxxxxxxR2 |
| Y1 | 1695-2690 | 5 - 6 | 3 | AISG1 | CPxxxxxxxxxxxxxxY1 |
| Y2 | 1710-2690 | 7 - 8 | 4 | AISG1 | CPxxxxxxxxxxxxxxY2 |
| Y3 | 1710-2690 | 9 - 10 | 5 | AISG1 | CPxxxxxxxxxxxxxxY3 |
| Y4 | 1710-2690 | 11 - 12 | 6 | AISG1 | CPxxxxxxxxxxxxxxY4 |
| Y5 | 1710-2690 | 13 - 14 | 7 | AISG1 | CPxxxxxxxxxxxxxxY5 |
| Y6 | 1695-2690 | 15 - 16 | 8 | AISG1 | CPxxxxxxxxxxxxxxY6 |

(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 – 2690 MHz \| 1710 – 2690 MHz \| 694 – 960 MHz |
| **Polarization** | ±45° |
| **Total Input Power, maximum** | 1,700 W @ 50 °C |

## Electrical Specifications

| **Frequency Band, MHz** | **694–790** | **790–890** | **890–960** | **1695–2180** | **2300–2690** | **1710–2180** | **2300–2690** |
|---|---|---|---|---|---|---|---|
| **Gain, dBi** | 14.6 | 14.9 | 15.2 | 16.9 | 18.6 | 18.2 | 19 |
| **Beam Centers, Horizontal, degrees** | | | | | | ±27 | ±23 |
| **Beamwidth, Horizontal, degrees** | 75 | 66 | 65 | 72 | 56 | 34 | 27 |
| **Beamwidth, Vertical, degrees** | 11.4 | 10.1 | 9.4 | 6.3 | 5.1 | 8 | 6.3 |
| **Beam Tilt, degrees** | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| **USLS (First Lobe), dB** | 16 | 16 | 15 | 21 | 21 | 16 | 18 |
| **Front-to-Back Ratio at 180°, dB** | 30 | 30 | 29 | 34 | 34 | 37 | 32 |
| **Isolation, Cross Polarization, dB** | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| **Isolation, Inter-band, dB** | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| **Isolation, Beam to Beam, dB** | | | | | | 17 | 17 |
| **VSWR \| Return loss, dB** | 1.5 \| 14.5 | 1.5 \| 14.5 | 1.5 \| 14.5 | 1.5 \| 14.5 | 1.5 \| 14.5 | 1.5 \| 14.5 | 1.5 \| 14.5 |
| **PIM, 3rd Order, 2 x 20 W, dBc** | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| **Input Power per Port at 50°C, maximum, watts** | 250 | 250 | 250 | 200 | 150 | 200 | 150 |

## Mechanical Specifications

| | |
|---|---|
| **Effective Projective Area (EPA), frontal** | 0.68 m² \| 7.319 ft² |
| **Effective Projective Area (EPA), lateral** | 0.21 m² \| 2.26 ft² |
| **Wind Loading @ Velocity, frontal** | 728.0 N @ 150 km/h (163.7 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, lateral** | 223.0 N @ 150 km/h (50.1 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, maximum** | 873.0 N @ 150 km/h (196.3 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, rear** | 501.0 N @ 150 km/h (112.6 lbf @ 150 km/h) |
| **Wind Speed, maximum** | 241 km/h (150 mph) |

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## Packaging and Weights

| | |
|---|---|
| **Width, packed** | 565 mm \| 22.244 in |
| **Depth, packed** | 309 mm \| 12.165 in |
| **Length, packed** | 2287 mm \| 90.039 in |
| **Weight, gross** | 61.4 kg \| 135.364 lb |

## Regulatory Compliance/Certifications

| Agency | Classification |
|---|---|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

## 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. |

## * Footnotes

| | |
|---|---|
| **Performance Note** | Severe environmental conditions may degrade optimum performance |