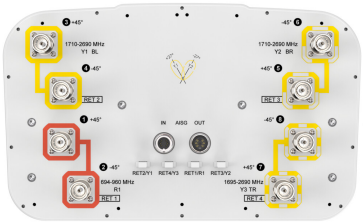
# RV2V-6533D-R4



8-port sector/multibeam antenna, 2x 694–960 MHz 65° HPBW,2x1695-2690MHZ 65° and 4x 1710–2690 MHz 4x 33°HPBW, 4x RET with tilt indicators

- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- All Internal RET actuators are connected in "Cascaded SRET" configuration

## General Specifications

| | |
|---|---|
| **Antenna Type** | Multibeam |
| **Band** | Multiband |
| **Grounding Type** | RF connector inner conductor and body grounded to reflector and mounting bracket |
| **Performance Note** | Outdoor usage |
| **RF Connector Interface** | 4.3-10 Female |
| **RF Connector Location** | Bottom |
| **RF Connector Quantity, mid band** | 6 |
| **RF Connector Quantity, low band** | 2 |
| **RF Connector Quantity, total** | 8 |

## 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) \| Mid band (3) |
| **Power Consumption, active state, maximum** | 10 W |
| **Power Consumption, idle state, maximum** | 2 W |
| **Protocol** | 3GPP/AISG 2.0 |

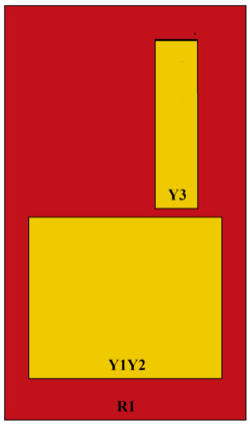
## Dimensions

| | |
|---|---|
| **Width** | 350 mm \| 13.78 in |
| **Depth** | 208 mm \| 8.189 in |
| **Length** | 2688 mm \| 105.827 in |

# RV2V-6533D-R4

| | |
|---|---|
| **Net Weight, antenna only** | 31.6 kg \| 69.666 lb |

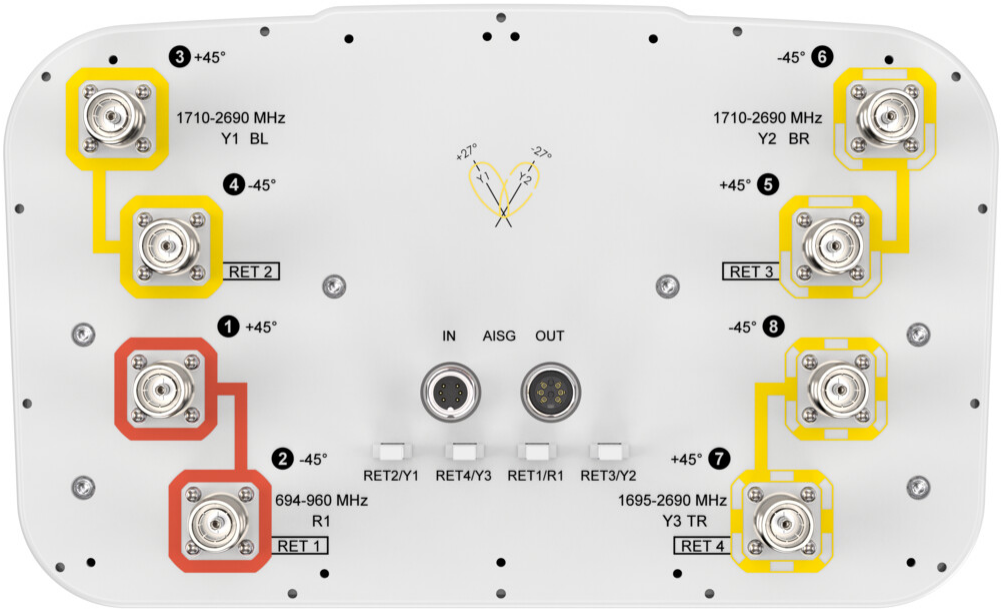
## Array Layout




| Array ID | Frequency (MHz) | RF Connector | RET (SRET) | AISG No. | AISG RET UID |
|---|---|---|---|---|---|
| R1 | 694-960 | 1 - 2 | 1 | AISG1 | CPxxxxxxxxxxxxxxR1 |
| Y1 | 1695-2690 | 3 - 4 | 2 | AISG1 | CPxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 5 - 6 | 3 | AISG1 | CPxxxxxxxxxxxxxxY2 |
| Y3 | 1695-2690 | 7 - 8 | 4 | AISG1 | CPxxxxxxxxxxxxxxY3 |

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

## Port Configuration




## Electrical Specifications

| | |
|---|---|
| **Impedance** | 50 ohm |
| **Operating Frequency Band** | 1695 – 2690 MHz \| 1710 – 2690 MHz \| 694 – 960 MHz |
| **Polarization** | ±45° |
| **Total Input Power, maximum** | 1,000 W |

# RV2V-6533D-R4

## Electrical Specifications

| | R1 | R1 | R1 | Y1-Y2 | Y1-Y2 | Y1-Y2 | Y1-Y2 | Y1-Y2 |
|---|---|---|---|---|---|---|---|---|
| **Frequency Band, MHz** | **694–790** | **790–890** | **880–960** | **1710–1880** | **1850–1990** | **1920–2170** | **2300–2400** | **2490–2690** |
| **RF Port** | 1,2 | 1,2 | 1,2 | 3-6 | 3-6 | 3-6 | 3-6 | 3-6 |
| **Beamwidth, Horizontal, degrees** | 71 | 69 | 67 | 35 | 33 | 31 | 27 | 25 |
| **Beamwidth, Vertical, degrees** | 8.9 | 7.9 | 7.3 | 7.3 | 6.8 | 6.5 | 5.8 | 5.3 |
| **Beam Tilt, degrees** | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| **USLS (First Lobe), dB** | 16 | 16 | 16 | 20 | 19 | 20 | 19 | 18 |
| **Front-to-Back Ratio at 180°, dB** | 30 | 33 | 34 | 31 | 35 | 37 | 36 | 33 |
| **Isolation, Cross Polarization, dB** | 28 | 28 | 28 | 25 | 25 | 25 | 25 | 25 |
| **Isolation, Inter-band, dB** | 28 | 28 | 28 | 27 | 27 | 27 | 27 | 27 |
| **Isolation, Beam to Beam, dB** | | | | 17 | 17 | 17 | 17 | 17 |
| **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 | 1.5 \| 14.0 |
| **PIM, 3rd Order, 2 x 20 W, dBc** | -153 | -153 | -153 | -153 | -153 | -153 | -153 | -153 |
| **Input Power per Port at 50°C, maximum, watts** | 300 | 300 | 300 | 250 | 250 | 250 | 250 | 250 |

## Electrical Specifications

| | Y3 | Y3 | Y3 | Y3 |
|---|---|---|---|---|
| **Frequency Band, MHz** | **1695–1880** | **1920–2170** | **2300–2400** | **2490–2690** |
| **RF Port** | 7,8 | 7,8 | 7,8 | 7,8 |
| **Beamwidth, Horizontal, degrees** | 58 | 60 | 63 | 65 |
| **Beamwidth, Vertical, degrees** | 7 | 6.2 | 5.5 | 5.2 |
| **Beam Tilt, degrees** | 2–12 | 2–12 | 2–12 | 2–12 |
| **USLS (First Lobe), dB** | 19 | 20 | 20 | 16 |
| **Front-to-Back Ratio at 180°, dB** | 33 | 38 | 38 | 35 |
| **Isolation, Cross Polarization, dB** | 27 | 27 | 27 | 27 |
| **Isolation, Inter-band, dB** | 27 | 27 | 27 | 27 |
| **VSWR \| Return loss, dB** | 1.5 \| 14.0 | 1.5 \| 14.0 | 1.5 \| 14.0 | 1.5 \| 14.0 |
| **PIM, 3rd Order, 2 x 20 W, dBc** | -153 | -153 | -153 | -153 |

| | | | | |
|---|---|---|---|---|
| **Input Power per Port at 50°C, maximum, watts** | 250 | 250 | 250 | 250 |

## Mechanical Specifications

| | |
|---|---|
| **Wind Loading @ Velocity, frontal** | 477.0 N @ 150 km/h (107.2 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, lateral** | 409.0 N @ 150 km/h (91.9 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, maximum** | 1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, rear** | 506.0 N @ 150 km/h (113.8 lbf @ 150 km/h) |
| **Wind Speed, maximum** | 241 km/h (150 mph) |

## Packaging and Weights

| | |
|---|---|
| **Width, packed** | 456 mm \| 17.953 in |
| **Depth, packed** | 357 mm \| 14.055 in |
| **Length, packed** | 2834 mm \| 111.575 in |
| **Weight, gross** | 45 kg \| 99.208 lb |

## Regulatory Compliance/Certifications

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

## 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. |

## * Footnotes

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