# RR-65B-R2VB

## 4-port sector antenna, 4x 694–960 MHz, 65° HPBW, 2x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Retractable tilt indicator rods
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector

## General Specifications

| | |
|---|---|
| **Antenna Type** | Sector |
| **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 (2) |
| **Power Consumption, active state, maximum** | 10 W |
| **Power Consumption, idle state, maximum** | 2 W |
| **Protocol** | 3GPP/AISG 2.0 (Single RET) |

## Dimensions

| | |
|---|---|
| **Width** | 467 mm \| 18.386 in |

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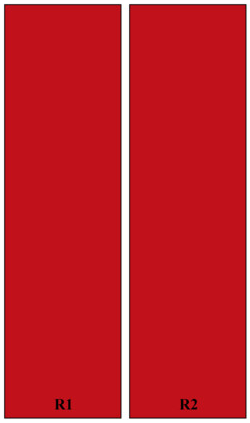
| | |
|---|---|
| **Depth** | 167 mm \| 6.575 in |
| **Length** | 1997 mm \| 78.622 in |
| **Net Weight, antenna only** | 24.5 kg \| 54.013 lb |

## Array Layout




| Array ID | Frequency (MHz) | RF Connector | HPBW | RET (SRET) | AISG No. | AISG RET UID |
|---|---|---|---|---|---|---|
| R1 | 694-960 | 1 - 2 | 65° | 1 | AISG1 | CPxxxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3 - 4 | 65° | 2 | AISG1 | CPxxxxxxxxxxxxxxR2 |

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

## Port Configuration


## Electrical Specifications

| | |
|---|---|
| **Impedance** | 50 ohm |

# RR-65B-R2VB

| | |
|---|---|
| **Operating Frequency Band** | 694 – 960 MHz |
| **Polarization** | ±45° |
| **Total Input Power, maximum** | 800 W |

## Electrical Specifications

| | **R1,R2** | **R1,R2** | **R1,R2** |
|---|---|---|---|
| **Frequency Band, MHz** | **694–790** | **790–890** | **890–960** |
| **RF Port** | 1,2,3,4 | 1,2,3,4 | 1,2,3,4 |
| **Gain, dBi** | 15.4 | 15.5 | 16.1 |
| **Beamwidth, Horizontal, degrees** | 66 | 64 | 66 |
| **Beamwidth, Vertical, degrees** | 11.2 | 9.7 | 9 |
| **Beam Tilt, degrees** | 0–10 | 0–10 | 0–10 |
| **USLS (First Lobe), dB** | 18 | 18 | 19 |
| **Front-to-Back Ratio, Copolarization 180° ± 30°, dB** | 27 | 29 | 27 |
| **Isolation, Cross Polarization, dB** | 26 | 26 | 26 |
| **Isolation, Inter-band, dB** | 26 | 26 | 26 |
| **VSWR \| Return loss, dB** | 1.5 \| 14.0 | 1.5 \| 14.0 | 1.5 \| 14.0 |
| **PIM, 3rd Order, 2 x 20 W, dBc** | -153 | -153 | -153 |
| **Input Power per Port, maximum, watts** | 300 | 300 | 300 |

## Electrical Specifications, BASTA

| **Frequency Band, MHz** | **694–790** | **790–890** | **890–960** |
|---|---|---|---|
| **Gain by all Beam Tilts, average, dBi** | 15 | 15.3 | 15.8 |
| **Gain by all Beam Tilts Tolerance, dB** | ±0.7 | ±0.3 | ±0.2 |
| **Beamwidth, Horizontal Tolerance, degrees** | ±4 | ±4 | ±5 |
| **Beamwidth, Vertical Tolerance, degrees** | ±1 | ±0.5 | ±0.5 |
| **CPR at Boresight, dB** | 25 | 25 | 25 |
| **CPR at Sector, dB** | 13 | 11 | 11 |

## Mechanical Specifications

| | |
|---|---|
| **Wind Loading @ Velocity, frontal** | 820.0 N @ 150 km/h (184.3 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, lateral** | 308.0 N @ 150 km/h (69.2 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, rear** | 1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h) |
| **Wind Speed, maximum** | 241 km/h (150 mph) |

# RR-65B-R2VB

## Packaging and Weights

| | |
|---|---|
| **Width, packed** | 542 mm \| 21.339 in |
| **Depth, packed** | 277 mm \| 10.906 in |
| **Length, packed** | 2197 mm \| 86.496 in |
| **Weight, gross** | 36 kg \| 79.366 lb |

## Regulatory Compliance/Certifications

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

## Included Products

| | | |
|---|---|---|
| BSAMNT-B95-03 | – | 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 |