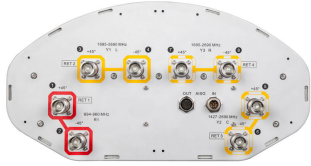


# RZVV-65B-R4



8-port sector antenna, 2x 694–960, 2x 1427–2690 and 4x 1695–2690 MHz, 65° HPBW, 4x RET

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

**OBSOLETE**

This product was discontinued on: November 30, 2023

## General Specifications

|   |  |
|---|--|
| <b>Antenna Type</b>                     | Sector   |
| <b>Band</b>                             | Multiband  |
| <b>Grounding Type</b>                   | RF connector inner conductor and body grounded to reflector and mounting bracket                                     |
| <b>Performance Note</b>                 | Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| <b>Radome Material</b>                  | Fiberglass, UV resistant   |
| <b>Reflector Material</b>               | Aluminum   |
| <b>RF Connector Interface</b>           | 4.3-10 Female  |
| <b>RF Connector Location</b>            | Bottom   |
| <b>RF Connector Quantity, high band</b> | 6  |
| <b>RF Connector Quantity, low band</b>  | 2  |
| <b>RF Connector Quantity, total</b>     | 8  |

## Remote Electrical Tilt (RET) Information

|   |                                   |
|---|-----------------------------------|
| <b>RET Hardware</b>                           | CommRET v2                        |
| <b>RET Interface</b>                          | 8-pin DIN Female   8-pin DIN Male |
| <b>RET Interface, quantity</b>                | 1 female   1 male                 |
| <b>Input Voltage</b>                          | 10–30 Vdc                         |
| <b>Internal RET</b>                           | High band (3)   Low band (1)      |
| <b>Power Consumption, idle state, maximum</b> | 1 W                               |

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|  |                            |
|--|----------------------------|
| <b>Power Consumption, normal conditions, maximum</b> | 8 W                        |
| <b>Protocol</b>                                      | 3GPP/AISG 2.0 (Single RET) |

## Dimensions

|   |                     |
|---|---------------------|
| <b>Width</b>                            | 395 mm   15.551 in  |
| <b>Depth</b>                            | 203 mm   7.992 in   |
| <b>Length</b>                           | 1980 mm   77.953 in |
| <b>Net Weight, without mounting kit</b> | 29.4 kg   64.816 lb |

## Array Layout

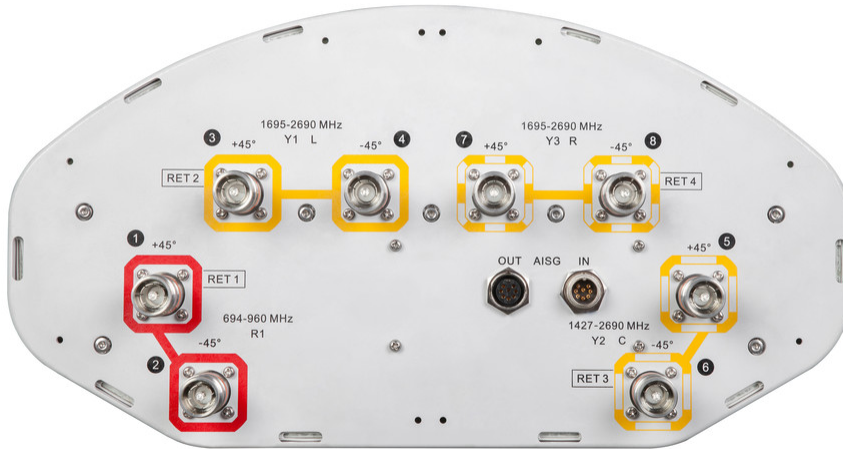
| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID         |
|-------|------------|-------|------------|----------------------|
| R1    | 694-960    | 1-2   | 1          | CPxxxxxxxxxxxxxxxxR1 |
| Y1    | 1695-2690  | 3-4   | 2          | CPxxxxxxxxxxxxxxxxY1 |
| Y2    | 1427-2690  | 5-6   | 3          | CPxxxxxxxxxxxxxxxxY2 |
| Y3    | 1695-2690  | 7-8   | 4          | CPxxxxxxxxxxxxxxxxY3 |

Left                      Right  
   Bottom

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

## Port Configuration

# RZVV-65B-R4



## Electrical Specifications

|                                   |   |
|-----------------------------------|---|
| <b>Impedance</b>                  | 50 ohm  |
| <b>Operating Frequency Band</b>   | 1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz |
| <b>Polarization</b>               | ±45°  |
| <b>Total Input Power, maximum</b> | 800 W @ 50 °C                                     |

## Electrical Specifications

| Frequency Band, MHz                      | 694–790  | 790–862  | 880–960  | 1427–1518 | 1695–1920 | 1920–2180 | 2300–2500 | 2500–2690 |
|--|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|
| <b>Gain, dBi</b>                         | 14.7     | 15.2     | 15.3     | 16.1      | 17.3      | 18.4      | 18.9      | 18.7      |
| <b>Beamwidth, Horizontal, degrees</b>    | 73       | 71       | 70       | 67        | 69        | 64        | 56        | 54        |
| <b>Beamwidth, Vertical, degrees</b>      | 12.1     | 11       | 10.1     | 7         | 5.9       | 5.2       | 4.5       | 4.3       |
| <b>Beam Tilt, degrees</b>                | 2–14     | 2–14     | 2–14     | 2–12      | 2–12      | 2–12      | 2–12      | 2–12      |
| <b>USLS (First Lobe), dB</b>             | 14       | 15       | 14       | 19        | 18        | 17        | 15        | 14        |
| <b>Front-to-Back Ratio at 180°, dB</b>   | 34       | 36       | 32       | 29        | 34        | 33        | 33        | 30        |
| <b>Isolation, Cross Polarization, dB</b> | 28       | 28       | 28       | 28        | 28        | 28        | 28        | 28        |
| <b>Isolation, Inter-band, dB</b>         | 28       | 28       | 28       | 28        | 28        | 28        | 28        | 28        |
| <b>VSWR   Return loss, dB</b>            | 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  |

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|   |      |      |      |      |      |      |      |      |
|---|------|------|------|------|------|------|------|------|
| <b>PIM, 3rd Order, 2 x 20 W, dBc</b>                | -150 | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| <b>Input Power per Port at 50°C, maximum, watts</b> | 300  | 300  | 300  | 250  | 250  | 250  | 200  | 200  |

## Electrical Specifications, BASTA

| <b>Frequency Band, MHz</b>                         | <b>694–790</b>                 | <b>790–862</b>                 | <b>880–960</b>                 | <b>1427–1518</b>               | <b>1695–1920</b>               | <b>1920–2180</b>               | <b>2300–2500</b>               | <b>2500–2690</b>               |
|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| <b>Gain by all Beam Tilts, average, dBi</b>        | 14.5                           | 14.9                           | 15.1                           | 15.8                           | 17                             | 18                             | 18.6                           | 18.2                           |
| <b>Gain by all Beam Tilts Tolerance, dB</b>        | ±0.3                           | ±0.3                           | ±0.3                           | ±0.4                           | ±0.7                           | ±0.6                           | ±0.6                           | ±0.7                           |
| <b>Gain by Beam Tilt, average, dBi</b>             | 2° 14.4<br>8° 14.5<br>14° 14.4 | 2° 14.8<br>8° 15.0<br>14° 14.9 | 2° 15.0<br>8° 15.1<br>14° 15.0 | 2° 15.7<br>7° 15.8<br>12° 15.8 | 2° 16.9<br>7° 17.1<br>12° 16.9 | 2° 17.9<br>7° 18.1<br>12° 17.7 | 2° 18.7<br>7° 18.8<br>12° 18.0 | 2° 18.2<br>7° 18.3<br>12° 17.8 |
| <b>Beamwidth, Horizontal Tolerance, degrees</b>    | ±2.6                           | ±2.4                           | ±1.5                           | ±2.6                           | ±5                             | ±7.5                           | ±7                             | ±8                             |
| <b>Beamwidth, Vertical Tolerance, degrees</b>      | ±0.9                           | ±0.5                           | ±0.6                           | ±0.3                           | ±0.5                           | ±0.4                           | ±0.2                           | ±0.3                           |
| <b>USLS, beampeak to 20° above beampeak, dB</b>    | 14                             | 15                             | 14                             | 17                             | 17                             | 17                             | 15                             | 13                             |
| <b>Front-to-Back Total Power at 180° ± 30°, dB</b> | 23                             | 23                             | 23                             | 25                             | 25                             | 26                             | 26                             | 24                             |
| <b>CPR at Boresight, dB</b>                        | 14                             | 14                             | 14                             | 18                             | 17                             | 19                             | 17                             | 17                             |
| <b>CPR at Sector, dB</b>                           | 10                             | 10                             | 8                              | 4                              | 9                              | 9                              | 8                              | 3                              |

## Mechanical Specifications

|   |   |
|---|---|
| <b>Wind Loading @ Velocity, frontal</b> | 519.0 N @ 150 km/h (116.7 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, lateral</b> | 268.0 N @ 150 km/h (60.2 lbf @ 150 km/h)  |
| <b>Wind Loading @ Velocity, maximum</b> | 662.0 N @ 150 km/h (148.8 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, rear</b>    | 497.0 N @ 150 km/h (111.7 lbf @ 150 km/h) |
| <b>Wind Speed, maximum</b>              | 241 km/h (150 mph)                        |

## Packaging and Weights

|                       |                     |
|-----------------------|---------------------|
| <b>Width, packed</b>  | 532 mm   20.945 in  |
| <b>Depth, packed</b>  | 387 mm   15.236 in  |
| <b>Length, packed</b> | 2127 mm   83.74 in  |
| <b>Weight, gross</b>  | 44.7 kg   98.547 lb |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b> |
|---------------|-----------------------|
|---------------|-----------------------|

# RZVV-65B-R4

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|               |  |
|---------------|--|
| 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   |



## 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

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