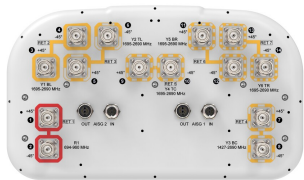


# RZV5-65D-R7



14-port sector antenna, 2x 694–960, 2x 1427–2690 and 10x 1695–2690 MHz, 65° HPBW, 7x 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
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Antenna shape optimized for wind load reduction

## 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                                                                    |
| Radome Material                  | Fiberglass, UV resistant                                                         |
| 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  | 2                                                                                |
| RF Connector Quantity, total     | 14                                                                               |

## Remote Electrical Tilt (RET) Information

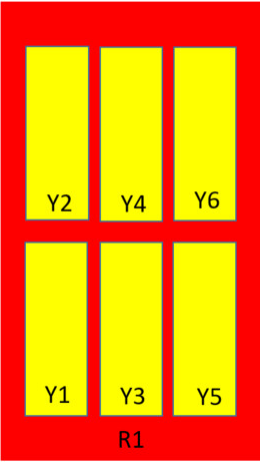
|                                          |                                   |
|------------------------------------------|-----------------------------------|
| RET Hardware                             | CommRET v2                        |
| RET Interface                            | 8-pin DIN Female   8-pin DIN Male |
| RET Interface, quantity                  | 2 female   2 male                 |
| Input Voltage                            | 10–30 Vdc                         |
| Internal RET                             | High band (6)   Low band (1)      |
| Power Consumption, active state, maximum | 8 W                               |
| Power Consumption, idle state, maximum   | 1 W                               |
| Protocol                                 | 3GPP/AISG 2.0 (Single RET)        |

# RZV5-65D-R7

## Dimensions

|                                  |                      |
|----------------------------------|----------------------|
| Width                            | 395 mm   15.551 in   |
| Depth                            | 228 mm   8.976 in    |
| Length                           | 2688 mm   105.827 in |
| Net Weight, without mounting kit | 38.7 kg   85.319 lb  |

## Array Layout

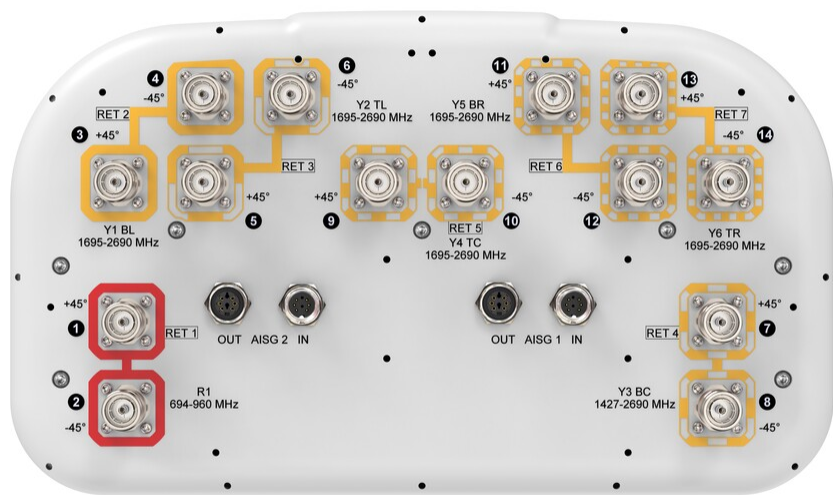


| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID     |
|-------|------------|-------|------------|------------------|
| R1    | 694-960    | 1-2   | 1          | CPxxxxxxxxxxxxR1 |
| Y1    | 1695-2690  | 3-4   | 2          | CPxxxxxxxxxxxxY1 |
| Y2    | 1695-2690  | 5-6   | 3          | CPxxxxxxxxxxxxY2 |
| Y3    | 1427-2690  | 7-8   | 4          | CPxxxxxxxxxxxxY3 |
| Y4    | 1695-2690  | 9-10  | 5          | CPxxxxxxxxxxxxY4 |
| Y5    | 1695-2690  | 11-12 | 6          | CPxxxxxxxxxxxxY5 |
| Y6    | 1695-2690  | 13-14 | 7          | CPxxxxxxxxxxxxY6 |

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

## Port Configuration

# RZV5-65D-R7



## Electrical Specifications

|                            |                                                   |
|----------------------------|---------------------------------------------------|
| Impedance                  | 50 ohm                                            |
| Operating Frequency Band   | 1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz |
| Polarization               | ±45°                                              |
| Total Input Power, maximum | 1,000 W @ 50 °C                                   |

## Electrical Specifications

| Frequency Band, MHz             | 694–790 | 790–890 | 890–960 | 1695–1920 | 1920–2200 | 2300–2500 | 2500–2690 | 1427–1518 | 1695–2690 |
|---------------------------------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Gain, dBi                       | 16.4    | 17      | 17      | 16.8      | 17.7      | 17.9      | 17.8      | 15        | 17.6      |
| Beamwidth, Horizontal, degrees  | 66      | 63      | 63      | 69        | 63        | 61        | 62        | 70        | 59        |
| Beamwidth, Vertical, degrees    | 9       | 8       | 7.4     | 7.2       | 6.5       | 5.8       | 5.5       | 9.6       | 6.9       |
| Beam Tilt, degrees              | 2–12    | 2–12    | 2–12    | 2–12      | 2–12      | 2–12      | 2–12      | 2–12      | 2–12      |
| USLS (First Lobe), dB           | 22      | 24      | 24      | 17        | 18        | 18        | 18        | 20        | 15        |
| Front-to-Back Ratio at 180°, dB | 41      | 35      | 33      | 34        | 37        | 35        | 32        | 32        | 39        |
| CPR at Boresight, dB            | 14      | 16      | 15      | 20        | 21        | 21        | 20        | 21        | 21        |

# RZV5-65D-R7

|                                               |            |            |            |            |            |            |            |            |            |
|-----------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Isolation, Cross Polarization, dB             | 27         | 27         | 27         | 27         | 27         | 27         | 27         | 25         | 25         |
| Isolation, Inter-band, dB                     | 28         | 28         | 28         | 25         | 25         | 25         | 25         | 25         | 25         |
| 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 | 1.5   14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc                 | -153       | -153       | -153       | -153       | -153       | -153       | -153       | -153       | -153       |
| Input Power per Port at 50° C, maximum, watts | 250        | 250        | 250        | 200        | 200        | 200        | 200        | 250        | 200        |

## Mechanical Specifications

|                                  |                                           |
|----------------------------------|-------------------------------------------|
| Wind Loading @ Velocity, frontal | 430.0 N @ 150 km/h (96.7 lbf @ 150 km/h)  |
| Wind Loading @ Velocity, lateral | 390.0 N @ 150 km/h (87.7 lbf @ 150 km/h)  |
| Wind Loading @ Velocity, maximum | 864.0 N @ 150 km/h (194.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 492.0 N @ 150 km/h (110.6 lbf @ 150 km/h) |
| Wind Speed, maximum              | 241 km/h (150 mph)                        |

## Packaging and Weights

|                |                      |
|----------------|----------------------|
| Width, packed  | 505 mm   19.882 in   |
| Depth, packed  | 386 mm   15.197 in   |
| Length, packed | 2831 mm   111.457 in |
| Weight, gross  | 58.9 kg   129.852 lb |

## Regulatory Compliance/Certifications

| Agency        | Classification                                                                 |
|---------------|--------------------------------------------------------------------------------|
| CHINA-ROHS    | Below maximum concentration value                                              |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| ROHS          | Compliant                                                                      |
| UK-ROHS       | Compliant                                                                      |



## 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

# RZV5-65D-R7

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