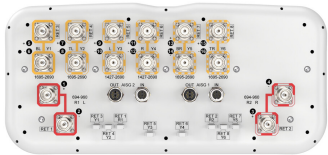


# RRZZV4-65D-R8NV1



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

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Retractable tilt indicator rods
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and High band
- 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 | 0  |
| RF Connector Quantity, mid band  | 12   |
| 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                             | Low band (2)   Mid band (6)       |
| Power Consumption, active state, maximum | 8 W                               |
| Power Consumption, idle state, maximum   | 1 W                               |

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Protocol3GPP/AISG 2.0

## Dimensions

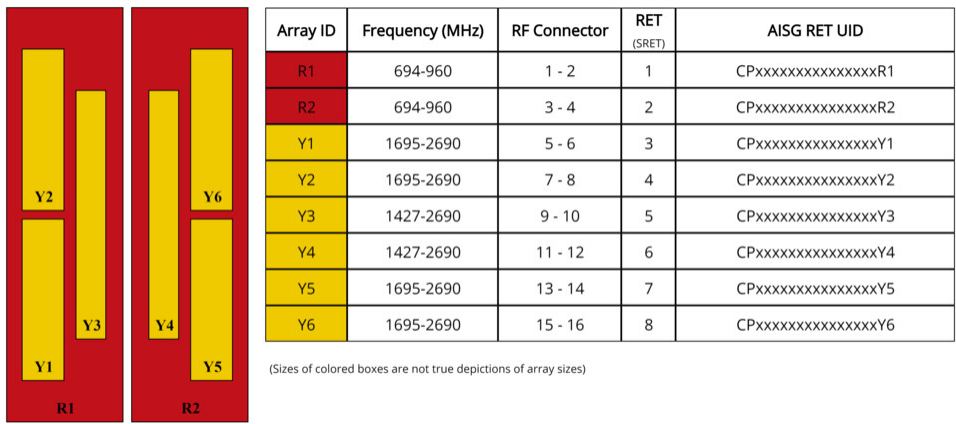
Width430 mm | 16.929 in

Depth197 mm | 7.756 in

Length2769 mm | 109.016 in

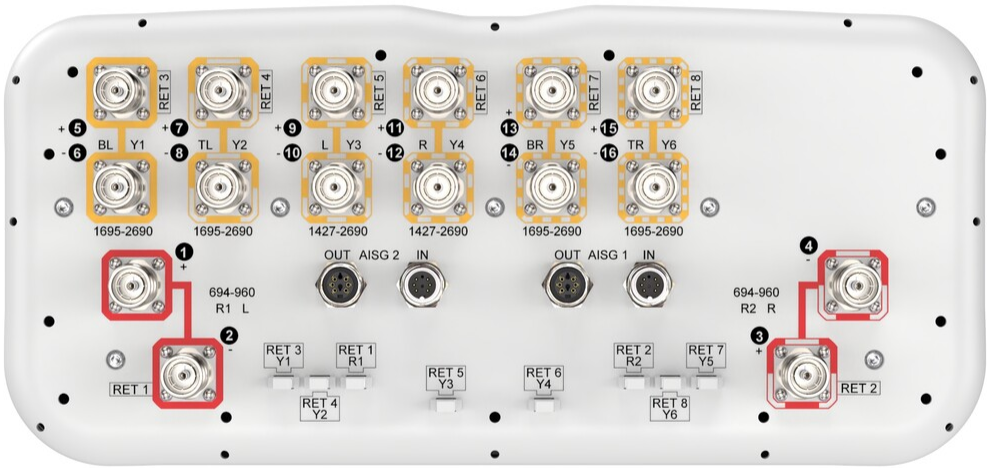
Net Weight, antenna only47.9 kg | 105.601 lb

## Array Layout



## Port Configuration

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## Electrical Specifications

|                            |   |
|----------------------------|---|
| Impedance                  | 50 ohm  |
| Operating Frequency Band   | 1427 – 2690 MHz   1695 – 2690 MHz   694 – 960 MHz |
| Polarization               | ±45°  |
| Total Input Power, maximum | 900 W @ 50 °C                                     |

## Electrical Specifications

| Frequency Band, MHz            | 698–806 | 790–896 | 890–960 | 1427–1518 | 1695–1990 | 1920–2300 | 2300–2500 | 2490–2690 |
|--------------------------------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|
| Beamwidth, Horizontal, degrees | 70      | 63      | 61      | 61        | 68        | 67        | 62        | 59        |
| Beamwidth, Vertical, degrees   | 7.6     | 6.8     | 6.4     | 6.9       | 5.7       | 5.1       | 4.6       | 4.3       |
| Beam Tilt, degrees             | 2–12    | 2–12    | 2–12    | 2–12      | 2–12      | 2–12      | 2–12      | 2–12      |

# RRZZV4-65D-R8NV1

|  |            |            |            |            |            |            |            |            |
|--|------------|------------|------------|------------|------------|------------|------------|------------|
| USLS (First Lobe), dB                        | 17         | 18         | 16         | 15         | 18         | 19         | 20         | 19         |
| Front-to-Back Ratio at 180°, dB              | 32         | 30         | 30         | 30         | 31         | 31         | 31         | 31         |
| Front-to-Back Total Power at 180° ± 30°, dB  | 24         | 23         | 22         | 24         | 26         | 27         | 27         | 27         |
| CPR at Boresight, dB                         | 24         | 24         | 23         | 16         | 19         | 18         | 18         | 16         |
| Isolation, Cross Polarization, dB            | 27         | 27         | 27         | 26         | 26         | 26         | 26         | 26         |
| Isolation, Inter-band, dB                    | 27         | 27         | 27         | 26         | 26         | 26         | 26         | 26         |
| 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 | 250        | 250        | 250        | 200        | 200        | 200        | 150        | 150        |

## Electrical Specifications

| Frequency Band, MHz                          | 1695–1990  | 1920–2300  | 2300–2500  | 2490–2690  |
|--|------------|------------|------------|------------|
| Beamwidth, Horizontal, degrees               | 69         | 64         | 62         | 62         |
| Beamwidth, Vertical, degrees                 | 6.3        | 5.6        | 5          | 4.8        |
| Beam Tilt, degrees                           | 2–12       | 2–12       | 2–12       | 2–12       |
| USLS (First Lobe), dB                        | 16         | 15         | 17         | 18         |
| Front-to-Back Ratio at 180°, dB              | 32         | 31         | 32         | 32         |
| Front-to-Back Total Power at 180° ± 30°, dB  | 26         | 25         | 26         | 26         |
| CPR at Boresight, dB                         | 21         | 20         | 18         | 18         |
| 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 | 200        | 200        | 150        | 150        |

## Mechanical Specifications

|                                  |   |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 680.0 N @ 150 km/h (152.9 lbf @ 150 km/h)   |
| Wind Loading @ Velocity, lateral | 347.0 N @ 150 km/h (78.0 lbf @ 150 km/h)    |
| Wind Loading @ Velocity, maximum | 1,020.0 N @ 150 km/h (229.3 lbf @ 150 km/h) |

# RRZZV4-65D-R8NV1

|                               |  |
|-------------------------------|--|
| Wind Loading @ Velocity, rear | 434.0 N @ 150 km/h (97.6 lbf @ 150 km/h) |
| Wind Speed, maximum           | 241 km/h (150 mph)                       |

## Packaging and Weights

|                |                      |
|----------------|----------------------|
| Width, packed  | 530 mm   20.866 in   |
| Depth, packed  | 356 mm   14.016 in   |
| Length, packed | 2897 mm   114.055 in |
| Weight, gross  | 68.9 kg   151.898 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   |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant  |
| UK-ROHS       | Compliant  |



## 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 |
|------------------|---|