

# RRVV-65D-R4VB



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

- Antenna with retractable tilt scale indicators and integrated pluggable 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

## 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                                                         |
| Radiator Material                | Aluminum                                                                         |
| 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  | 4                                                                                |
| RF Connector Quantity, low band  | 4                                                                                |
| 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 (2)   Mid band (2)       |
| Power Consumption, active state, maximum | 10 W                              |
| Power Consumption, idle state, maximum   | 2 W                               |
| Protocol                                 | 3GPP/AISG 2.0 (Single RET)        |

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## Dimensions

|                          |                     |
|--------------------------|---------------------|
| Width                    | 498 mm   19.606 in  |
| Depth                    | 197 mm   7.756 in   |
| Length                   | 2497 mm   98.307 in |
| Net Weight, antenna only | 38.2 kg   84.216 lb |

## Array Layout

Y1

R1

Y2

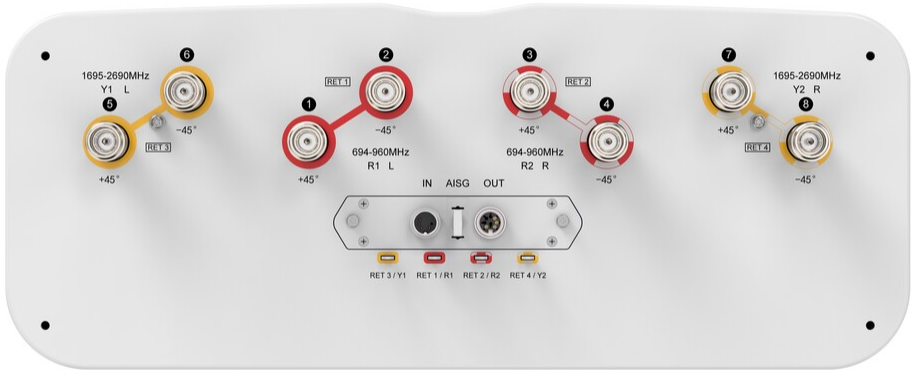
R2

| Array ID | Frequency (MHz) | RF Connector | HPBW | RET (SRET) | AISG No. | AISG RET UID     |
|----------|-----------------|--------------|------|------------|----------|------------------|
| R1       | 694-960         | 1 - 2        | 65°  | 1          | AISG1    | CPxxxxxxxxxxxxR1 |
| R2       | 694-960         | 3 - 4        | 65°  | 2          | AISG1    | CPxxxxxxxxxxxxR2 |
| Y1       | 1695-2690       | 5 - 6        | 65°  | 3          | AISG1    | CPxxxxxxxxxxxxY1 |
| Y2       | 1695-2690       | 7 - 8        | 65°  | 4          | AISG1    | CPxxxxxxxxxxxxY2 |

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

## Port Configuration

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## Electrical Specifications

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

## Electrical Specifications

|                                                    | R1,R2   | R1,R2   | R1,R2   | Y1,Y2     | Y1,Y2     | Y1,Y2     | Y1,Y2     |
|----------------------------------------------------|---------|---------|---------|-----------|-----------|-----------|-----------|
| Frequency Band, MHz                                | 698–806 | 790–894 | 890–960 | 1695–1995 | 1920–2300 | 2300–2500 | 2490–2690 |
| RF Port                                            | 1-4     | 1-4     | 1-4     | 5-8       | 5-8       | 5-8       | 5-8       |
| Gain, dBi                                          | 16.2    | 16.7    | 16.8    | 17.9      | 18.4      | 18.3      | 18        |
| Beamwidth, Horizontal, degrees                     | 68      | 61      | 57      | 65        | 59        | 59        | 59        |
| Beamwidth, Vertical, degrees                       | 8.8     | 7.9     | 7.2     | 5.1       | 4.5       | 4.1       | 3.9       |
| Beam Tilt, degrees                                 | 2–12    | 2–12    | 2–12    | 2–12      | 2–12      | 2–12      | 2–12      |
| USLS (First Lobe), dB                              | 16      | 17      | 18      | 18        | 18        | 15        | 16        |
| Front-to-Back Ratio, Copolarization 180° ± 30°, dB | 26      | 29      | 28      | 28        | 28        | 26        | 28        |

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|                                      |            |            |            |            |            |            |            |
|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|
| CPR at Boresight, dB                 | 20         | 22         | 22         | 18         | 22         | 22         | 19         |
| Isolation, Cross Polarization, dB    | 27         | 27         | 27         | 28         | 28         | 28         | 28         |
| Isolation, Inter-band, dB            | 27         | 27         | 27         | 28         | 28         | 28         | 28         |
| 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 |
| PIM, 3rd Order, 2 x 20 W, dBc        | -153       | -153       | -153       | -153       | -153       | -153       | -153       |
| Input Power per Port, maximum, watts | 250        | 250        | 250        | 200        | 170        | 170        | 170        |

## Mechanical Specifications

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| Wind Loading @ Velocity, frontal | 971.0 N @ 150 km/h (218.3 lbf @ 150 km/h)   |
| Wind Loading @ Velocity, lateral | 312.0 N @ 150 km/h (70.1 lbf @ 150 km/h)    |
| Wind Loading @ Velocity, maximum | 1,363.0 N @ 150 km/h (306.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 769.0 N @ 150 km/h (172.9 lbf @ 150 km/h)   |
| Wind Speed, maximum              | 241 km/h (150 mph)                          |

## Packaging and Weights

|                |                      |
|----------------|----------------------|
| Width, packed  | 593 mm   23.346 in   |
| Depth, packed  | 317 mm   12.48 in    |
| Length, packed | 2820 mm   111.024 in |
| Weight, gross  | 54 kg   119.049 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.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a> |
| ROHS          | Compliant                                                                                                                |
| UK-ROHS       | Compliant                                                                                                                |



## Included Products

|               |   |                                                                                                                                                                                          |
|---------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BSAMNT-B95-02 | – | 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, one middle bracket set and one bottom bracket set. |
|---------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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\* Footnotes

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