

# RVV65B-C3-3XR



6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 3x 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

|   |  |
|---|--|
| <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>RF Connector Interface</b>           | 4.3-10 Female  |
| <b>RF Connector Location</b>            | Bottom   |
| <b>RF Connector Quantity, high band</b> | 0  |
| <b>RF Connector Quantity, mid band</b>  | 4  |
| <b>RF Connector Quantity, low band</b>  | 2  |
| <b>RF Connector Quantity, total</b>     | 6  |

## Remote Electrical Tilt (RET) Information

|   |                                   |
|---|-----------------------------------|
| <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>                             | Low band (1)   Mid band (2)       |
| <b>Power Consumption, active state, maximum</b> | 10 W                              |
| <b>Power Consumption, idle state, maximum</b>   | 1 W                               |
| <b>Protocol</b>                                 | 3GPP/AISG 2.0                     |

## Dimensions

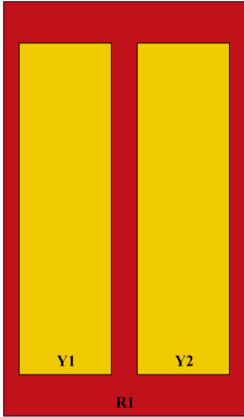
|               |                     |
|---------------|---------------------|
| <b>Width</b>  | 301 mm   11.85 in   |
| <b>Depth</b>  | 180 mm   7.087 in   |
| <b>Length</b> | 1850 mm   72.835 in |

# RVV65B-C3-3XR

**Net Weight, antenna only**

23 kg | 50.706 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    | CPxxxxxxxxxxxxR1 |
| Y1       | 1695-2690       | 3 - 4        | 65°  | 2          | AISG1    | CPxxxxxxxxxxxxY1 |
| Y2       | 1695-2690       | 5 - 6        | 65°  | 3          | AISG1    | CPxxxxxxxxxxxxY2 |

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

## Port Configuration



## Electrical Specifications

|                                 |                                 |
|---------------------------------|---------------------------------|
| <b>Impedance</b>                | 50 ohm                          |
| <b>Operating Frequency Band</b> | 1695 – 2690 MHz   694 – 960 MHz |
| <b>Polarization</b>             | ±45°                            |

# RVV65B-C3-3XR

Total Input Power, maximum

500 W @ 50 °C

## Electrical Specifications

| Frequency Band, MHz                          | 694–790  | 790–890  | 890–960  | 1695–1920 | 1920–2180 | 2300–2500 | 2500–2690 |
|--|----------|----------|----------|-----------|-----------|-----------|-----------|
| Gain at Mid Tilt, dBi                        | 15       | 15.4     | 15.4     | 17.8      | 18.8      | 19.2      | 19.1      |
| Beamwidth, Horizontal, degrees               | 71       | 71       | 68       | 63        | 61        | 61        | 62        |
| Beamwidth, Vertical, degrees                 | 11.7     | 10.5     | 9.9      | 5.6       | 5         | 4.3       | 4.1       |
| Beam Tilt, degrees                           | 0–13     | 0–13     | 0–13     | 2–12      | 2–12      | 2–12      | 2–12      |
| USLS (First Lobe), dB                        | 16       | 16       | 16       | 21        | 19        | 20        | 17        |
| Front-to-Back Ratio at 180°, dB              | 29       | 34       | 30       | 30        | 33        | 35        | 32        |
| Front-to-Back Total Power at 180° ± 30°, dB  | 23       | 24       | 23       | 24        | 26        | 27        | 25        |
| Isolation, Cross Polarization, dB            | 28       | 28       | 28       | 28        | 28        | 28        | 28        |
| Isolation, Inter-band, dB                    | 30       | 30       | 30       | 30        | 30        | 30        | 30        |
| 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                | -150     | -150     | -150     | -150      | -150      | -150      | -150      |
| Input Power per Port at 50°C, maximum, watts | 300      | 300      | 300      | 250       | 250       | 250       | 250       |

## Mechanical Specifications

|                                  |   |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 281.0 N @ 150 km/h (63.2 lbf @ 150 km/h)  |
| Wind Loading @ Velocity, lateral | 247.0 N @ 150 km/h (55.5 lbf @ 150 km/h)  |
| Wind Loading @ Velocity, maximum | 618.0 N @ 150 km/h (138.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 286.0 N @ 150 km/h (64.3 lbf @ 150 km/h)  |
| Wind Speed, maximum              | 241 km/h (150 mph)                        |

## Packaging and Weights

|                |                     |
|----------------|---------------------|
| Width, packed  | 409 mm   16.102 in  |
| Depth, packed  | 299 mm   11.772 in  |
| Length, packed | 2036 mm   80.158 in |
| Weight, gross  | 34 kg   74.957 lb   |

## Regulatory Compliance/Certifications

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| Agency        | Classification   |
|---------------|--|
| CE            | Compliant with the relevant CE product directives  |
| CHINA-ROHS    | Above 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/Exempted   |
| UK-ROHS       | Compliant/Exempted   |



## 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