

# RRZZVV-65B-R6N43



12-port sector antenna, 4x 694-960, 4x 1427-2690 and 4x 1695-2690 MHz, 65° HPBW, 6x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Retractable tilt indicator rods
- Antenna shape optimized for wind load reduction
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

## General Specifications

|   |  |
|---|--|
| <b>Antenna Type</b>                     | Sector   |
| <b>Band</b>                             | Multiband  |
| <b>Color</b>                            | Light Gray (RAL 7035)  |
| <b>Grounding Type</b>                   | RF connector inner conductor and body grounded to reflector and mounting bracket |
| <b>Performance Note</b>                 | Outdoor usage  |
| <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> | 0  |
| <b>RF Connector Quantity, mid band</b>  | 8  |
| <b>RF Connector Quantity, low band</b>  | 4  |
| <b>RF Connector Quantity, total</b>     | 12   |

## 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>                  | 2 female   2 male                 |
| <b>Input Voltage</b>                            | 10-30 Vdc                         |
| <b>Internal RET</b>                             | Low band (2)   Mid band (4)       |
| <b>Power Consumption, active state, maximum</b> | 8 W                               |
| <b>Power Consumption, idle state, maximum</b>   | 1 W                               |
| <b>Protocol</b>                                 | 3GPP/AISG 2.0 (Single RET)        |

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## Dimensions

|                                 |                     |
|---------------------------------|---------------------|
| <b>Width</b>                    | 430 mm   16.929 in  |
| <b>Depth</b>                    | 197 mm   7.756 in   |
| <b>Length</b>                   | 2100 mm   82.677 in |
| <b>Net Weight, antenna only</b> | 32.4 kg   71.43 lb  |

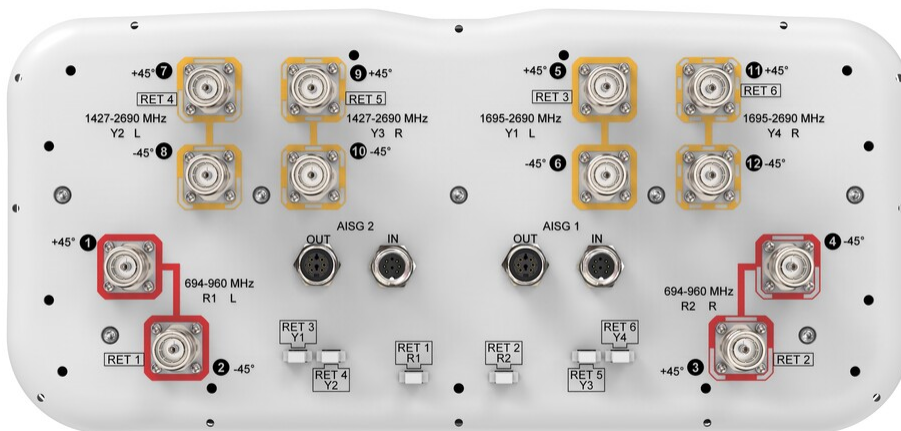
## Array Layout



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID         |
|-------|------------|-------|------------|----------------------|
| R1    | 694-960    | 1-2   | 1          | CPxxxxxxxxxxxxxxxxR1 |
| R2    | 694-960    | 3-4   | 2          | CPxxxxxxxxxxxxxxxxR2 |
| Y1    | 1695-2690  | 5-6   | 3          | CPxxxxxxxxxxxxxxxxY1 |
| Y2    | 1427-2690  | 7-8   | 4          | CPxxxxxxxxxxxxxxxxY2 |
| Y3    | 1427-2690  | 9-10  | 5          | CPxxxxxxxxxxxxxxxxY3 |
| Y4    | 1695-2690  | 11-12 | 6          | CPxxxxxxxxxxxxxxxxY4 |

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

## Port Configuration



# RRZZVV-65B-R6N43

## 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> | 900 W @ 50 °C                                     |
| <b>BASTA Version, electrical</b>  | BASTA v12   |

## Electrical Specifications

|   | <b>R1,R2</b>   | <b>R1,R2</b>   | <b>R1,R2</b>   | <b>Y2/Y3</b>     | <b>Y2/Y3</b>     | <b>Y2/Y3</b>     | <b>Y2/Y3</b>     | <b>Y2/Y3</b>     |
|---|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|
| <b>Frequency Band, MHz</b>                          | <b>698–806</b> | <b>790–894</b> | <b>890–960</b> | <b>1427–1518</b> | <b>1695–1995</b> | <b>1920–2300</b> | <b>2300–2500</b> | <b>2490–2690</b> |
| <b>RF Port</b>                                      | 1-4            | 1-4            | 1-4            | 7-10             | 7-10             | 7-10             | 7-10             | 7-10             |
| <b>Gain at Mid Tilt, dBi</b>                        | 14.4           | 15.1           | 15.3           | 15.4             | 16.7             | 17.5             | 17.6             | 18               |
| <b>Beamwidth, Horizontal, degrees</b>               | 66             | 57             | 54             | 72               | 66               | 61               | 61               | 57               |
| <b>Beamwidth, Vertical, degrees</b>                 | 10.4           | 9.4            | 8.5            | 6.8              | 5.7              | 5.2              | 4.6              | 4.4              |
| <b>Beam Tilt, degrees</b>                           | 2–12           | 2–12           | 2–12           | 2–12             | 2–12             | 2–12             | 2–12             | 2–12             |
| <b>USLS (First Lobe), dB</b>                        | 18             | 17             | 16             | 17               | 16               | 17               | 19               | 17               |
| <b>Front-to-Back Ratio at 180°, dB</b>              | 31             | 31             | 34             | 31               | 35               | 33               | 33               | 35               |
| <b>Front-to-Back Total Power at 180° ± 30°, dB</b>  | 21             | 22             | 21             | 21               | 28               | 29               | 27               | 28               |
| <b>CPR at Boresight, dB</b>                         | 26             | 25             | 22             | 21               | 18               | 18               | 22               | 17               |
| <b>CPR at Sector, dB</b>                            | 10             | 9              | 6              | 7                | 7                | 5                | 3                | 2                |
| <b>Isolation, Cross Polarization, dB</b>            | 27             | 27             | 27             | 26               | 26               | 26               | 26               | 26               |
| <b>Isolation, Inter-band, dB</b>                    | 27             | 27             | 27             | 26               | 26               | 26               | 26               | 26               |
| <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         |
| <b>PIM, 3rd Order, 2 x 20 W, dBc</b>                | -153           | -153           | -153           | -153             | -153             | -153             | -153             | -153             |
| <b>Input Power per Port at 50°C, maximum, watts</b> | 300            | 300            | 300            | 250              | 250              | 250              | 200              | 200              |

## Electrical Specifications

|                              | <b>Y1/Y4</b>     | <b>Y1/Y4</b>     | <b>Y1/Y4</b>     | <b>Y1/Y4</b>     |
|------------------------------|------------------|------------------|------------------|------------------|
| <b>Frequency Band, MHz</b>   | <b>1695–1995</b> | <b>1920–2300</b> | <b>2300–2500</b> | <b>2490–2690</b> |
| <b>RF Port</b>               | 5,6,11,12        | 5,6,11,12        | 5,6,11,12        | 5,6,11,12        |
| <b>Gain at Mid Tilt, dBi</b> | 17               | 17.8             | 18.4             | 18.3             |

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|   |          |          |          |          |
|---|----------|----------|----------|----------|
| <b>Beamwidth, Horizontal, degrees</b>               | 69       | 66       | 60       | 61       |
| <b>Beamwidth, Vertical, degrees</b>                 | 5.7      | 5.2      | 4.6      | 4.4      |
| <b>Beam Tilt, degrees</b>                           | 2-12     | 2-12     | 2-12     | 2-12     |
| <b>USLS (First Lobe), dB</b>                        | 17       | 17       | 20       | 21       |
| <b>Front-to-Back Ratio at 180°, dB</b>              | 34       | 29       | 34       | 36       |
| <b>Front-to-Back Total Power at 180° ± 30°, dB</b>  | 26       | 26       | 25       | 26       |
| <b>CPR at Boresight, dB</b>                         | 21       | 20       | 20       | 19       |
| <b>CPR at Sector, dB</b>                            | 10       | 8        | 9        | 7        |
| <b>Isolation, Cross Polarization, dB</b>            | 27       | 27       | 27       | 27       |
| <b>Isolation, Inter-band, dB</b>                    | 26       | 26       | 26       | 26       |
| <b>VSWR   Return loss, dB</b>                       | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 | 1.5 14.0 |
| <b>PIM, 3rd Order, 2 x 20 W, dBc</b>                | -153     | -153     | -153     | -153     |
| <b>Input Power per Port at 50°C, maximum, watts</b> | 250      | 250      | 200      | 200      |

## Mechanical Specifications

|   |   |
|---|---|
| <b>Wind Loading @ Velocity, frontal</b> | 494.0 N @ 150 km/h (111.1 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, lateral</b> | 266.0 N @ 150 km/h (59.8 lbf @ 150 km/h)  |
| <b>Wind Loading @ Velocity, maximum</b> | 780.0 N @ 150 km/h (175.4 lbf @ 150 km/h) |
| <b>Wind Loading @ Velocity, rear</b>    | 319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)  |
| <b>Wind Speed, maximum</b>              | 241 km/h (150 mph)                        |

## Packaging and Weights

|                       |                     |
|-----------------------|---------------------|
| <b>Width, packed</b>  | 530 mm   20.866 in  |
| <b>Depth, packed</b>  | 349 mm   13.74 in   |
| <b>Length, packed</b> | 2272 mm   89.449 in |
| <b>Weight, gross</b>  | 44.6 kg   98.326 lb |

## Regulatory Compliance/Certifications

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

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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

# BSAMNT-3

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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.

## Product Classification

**Product Type** Downtilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 115 mm | 4.528 in

**Compatible Diameter, minimum** 60 mm | 2.362 in

**Weight, net** 6.2 kg | 13.669 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 6.4 kg | 14.11 lb

## Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| CE            | Compliant with the relevant CE product directives  |
| 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  |

# BSAMNT-3

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