# RRV4-65D-R6-V5



12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- New aerodynamic endcaps for wind load optimization

This product will be discontinued on: December 31, 2025

### 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 Quantity, high band 0
RF Connector Quantity, mid band 8
RF Connector Quantity, low band 4
RF Connector Quantity, total 12

### Remote Electrical Tilt (RET) Information

**RET Hardware** CommRET v2

**RET Interface, quantity** 1 female | 1 male

Input Voltage 10-30 Vdc

Internal RET Low band (2) | Mid band (4)

Power Consumption, active state, maximum  $8~\mathrm{W}$  Power Consumption, idle state, maximum  $1~\mathrm{W}$ 

**Protocol** 3GPP/AISG 2.0



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#### Dimensions

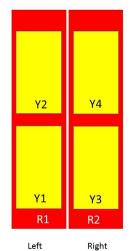
**Width** 498 mm | 19.606 in

**Depth** 197 mm | 7.756 in

**Length** 2688 mm | 105.827 in

Net Weight, antenna only 42 kg | 92.594 lb

### Array Layout

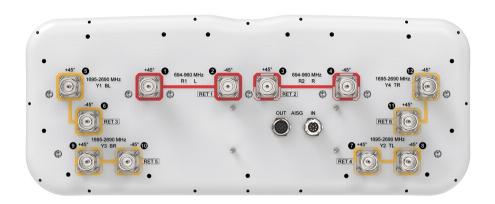


| Array | Freq (MHz) | Conns | RET<br>(SRET) | AISG RET UID       |
|-------|------------|-------|---------------|--------------------|
| R1    | 694-960    | 1-2   | 1             | CPxxxxxxxxxxxxxxR1 |
| R2    | 694-960    | 3-4   | 2             | CPxxxxxxxxxxxxxR2  |
| Y1    | 1695-2690  | 5-6   | 3             | CPxxxxxxxxxxxxxY1  |
| Y2    | 1695-2690  | 7-8   | 4             | CPxxxxxxxxxxxxxY2  |
| Y3    | 1695-2690  | 9-10  | 5             | CPxxxxxxxxxxxxxXY3 |
| Y4    | 1695-2690  | 11-12 | 6             | CPxxxxxxxxxxxxxY4  |

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

## Port Configuration

Bottom



### **Electrical Specifications**

**Impedance** 50 ohm

**Operating Frequency Band** 1695 – 2690 MHz | 694 – 960 MHz

Polarization ±45°

**Total Input Power, maximum** 1,400 W @ 50 °C

## **Electrical Specifications**

| Frequency Band, MHz                | 694-790 | 790-890 | 890-960 | 1695-1880 | 0 1850–1990 | 0 1920-2180 | 0 2300-2500 | 2500-2690 |
|------------------------------------|---------|---------|---------|-----------|-------------|-------------|-------------|-----------|
| Gain, dBi                          | 16.1    | 16.4    | 16.7    | 17.7      | 18.2        | 18.4        | 18.5        | 17.5      |
| Beamwidth, Horizontal, degrees     | 66      | 61      | 65      | 62        | 59          | 58          | 64          | 73        |
| Beamwidth, Vertical, degrees       | 8.2     | 7.4     | 6.9     | 7.2       | 6.7         | 6.4         | 5.6         | 5.3       |
| Beam Tilt, degrees                 | 2-12    | 2-12    | 2-12    | 2-12      | 2-12        | 2-12        | 2-12        | 2-12      |
| USLS (First Lobe), dB              | 20      | 15      | 20      | 16        | 18          | 19          | 18          | 20        |
| Front-to-Back Ratio at 180°,<br>dB | 34      | 32      | 33      | 39        | 39          | 39          | 34          | 32        |
| CPR at Boresight, dB               | 30      | 27      | 20      | 20        | 21          | 22          | 20          | 18        |
| CPR at Sector, dB                  | 9       | 8       | 8       | 10        | 10          | 7           | 6           | 5         |

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| Isolation, Cross Polarization, dB | 28         | 28         | 28         | 28         | 28         | 28         | 28         | 28         |
|-----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Isolation, Inter-band, dB         | 28         | 28         | 28         | 28         | 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 | 1.5   14.0 |
| PIM, 3rd Order, 2 x 20 W, dBc     | -150       | -150       | -150       | -150       | -150       | -150       | -150       | -150       |
| Input Power per Port at 50°C,     | 300        | 300        | 300        | 250        | 250        | 250        | 200        | 200        |

### Mechanical Specifications

 Wind Loading @ Velocity, frontal
 970.0 N @ 150 km/h (218.1 lbf @ 150 km/h)

 Wind Loading @ Velocity, lateral
 304.0 N @ 150 km/h (68.3 lbf @ 150 km/h)

 Wind Loading @ Velocity, maximum
 1,162.0 N @ 150 km/h (261.2 lbf @ 150 km/h)

 Wind Loading @ Velocity, rear
 667.0 N @ 150 km/h (149.9 lbf @ 150 km/h)

Wind Speed, maximum 241 km/h (150 mph)

### Packaging and Weights

 Width, packed
 565 mm | 22.244 in

 Depth, packed
 309 mm | 12.165 in

 Length, packed
 2875 mm | 113.189 in

 Weight, gross
 59 kg | 130.073 lb

### Regulatory Compliance/Certifications

#### Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

#### 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

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

