# FFVV-65B-R3-V1

8-port sector antenna, 4x 617-894 and 4x 1695–2690 MHz, 65° HPBW, 3x RET

- Meets -153dBc 3rd order PIM for 1695-2690MHz, using 2x40W carriers

## 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** | Low loss circuit board |
| **Reflector Material** | Aluminum |
| **RF Connector Interface** | 4.3-10 Female |
| **RF Connector Location** | Bottom |
| **RF Connector Quantity, high band** | 4 |
| **RF Connector Quantity, mid band** | 0 |
| **RF Connector Quantity, low band** | 4 |
| **RF Connector Quantity, total** | 8 |

## Remote Electrical Tilt (RET) Information

| | |
|---|---|
| **RET Interface** | 8-pin DIN Female \| 8-pin DIN Male |
| **RET Interface, quantity** | 1 female \| 1 male |
| **Input Voltage** | 10–30 Vdc |
| **Internal RET** | High band (2) \| Low band (1) |
| **Power Consumption, idle state, maximum** | 2 W |
| **Power Consumption, normal conditions, maximum** | 10 W |
| **Protocol** | 3GPP/AISG 2.0 (Single RET) |

## Dimensions

# FFVV-65B-R3-V1

| | |
|---|---|
| **Width** | 640 mm \| 25.197 in |
| **Depth** | 235 mm \| 9.252 in |
| **Length** | 1828 mm \| 71.969 in |
| **Net Weight, without mounting kit** | 45.5 kg \| 100.31 lb |

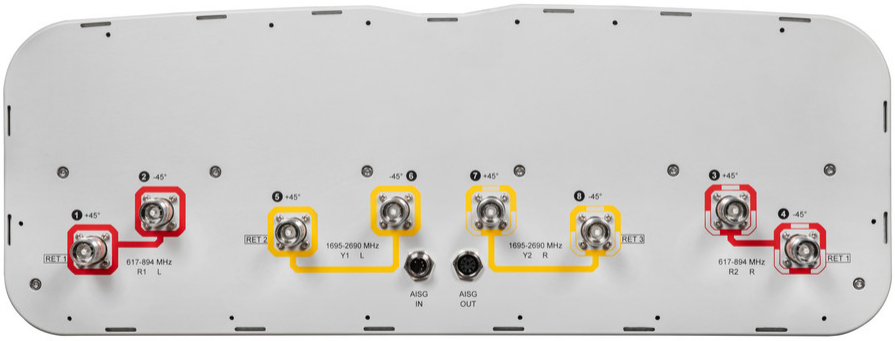
## Array Layout


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

| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|---|---|---|---|---|
| R1 | 617-894 | 1-2 | 1 | CPxxxxxxxxxxxxxxxR1 |
| R2 | 617-894 | 3-4 | | |
| Y1 | 1695-2690 | 5-6 | 2 | CPxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7-8 | 3 | CPxxxxxxxxxxxxxxxY2 |

## Port Configuration

# FFVV-65B-R3-V1




## Electrical Specifications

| | |
|---|---|
| **Impedance** | 50 ohm |
| **Operating Frequency Band** | 1695 – 2690 MHz \| 617 – 894 MHz |
| **Polarization** | ±45° |
| **Total Input Power, maximum** | 900 W @ 50 °C |

## Electrical Specifications

| **Frequency Band, MHz** | **617–698** | **698–894** | **1695–1880** | **1850–1990** | **1920–2200** | **2300–2500** | **2500–2690** |
|---|---|---|---|---|---|---|---|
| **Gain, dBi** | 14.3 | 15 | 17.8 | 18 | 18.7 | 18.8 | 18.8 |
| **Beamwidth, Horizontal, degrees** | 63 | 61 | 67 | 65 | 61 | 58 | 61 |
| **Beamwidth, Vertical, degrees** | 14.6 | 12.3 | 5.7 | 5.5 | 5.1 | 4.4 | 4.2 |
| **Beam Tilt, degrees** | 2–14 | 2–14 | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| **USLS (First Lobe), dB** | 20 | 19 | 20 | 19 | 21 | 20 | 20 |
| **Front-to-Back Ratio at 180°, dB** | 29 | 33 | 36 | 39 | 39 | 35 | 37 |
| **Isolation, Cross Polarization, dB** | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| **Isolation, Inter-band, dB** | 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 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PIM, 3rd Order, 2 x 20 W, dBc** | -150 | -153 | | | | | |
| **PIM, 3rd Order, 2 x 40 W, dBc** | | | -153 | -153 | -153 | -153 | -153 |
| **Input Power per Port at 50°C, maximum, watts** | 250 | 250 | 200 | 200 | 200 | 200 | 200 |

## Mechanical Specifications

| | |
|---|---|
| **Mechanical Tilt Range** | 0°–15° |
| **Wind Loading @ Velocity, frontal** | 765.0 N @ 150 km/h (172.0 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, lateral** | 251.0 N @ 150 km/h (56.4 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, maximum** | 1,032.0 N @ 100 mph (232.0 lbf @ 100 mph) |
| **Wind Loading @ Velocity, rear** | 788.0 N @ 150 km/h (177.1 lbf @ 150 km/h) |
| **Wind Speed, maximum** | 241 km/h (150 mph) |

## Packaging and Weights

| | |
|---|---|
| **Width, packed** | 752 mm \| 29.606 in |
| **Depth, packed** | 387 mm \| 15.236 in |
| **Length, packed** | 1982 mm \| 78.032 in |
| **Weight, gross** | 62.5 kg \| 137.789 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 www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

## 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 |