

# JAVV-33C-R3



8-port sector antenna, 2x 698–803, 2x 824–894 and 4x 1695–2690MHz, 33° HPBW, low bands each have a RET and high bands share a RET

- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput

## General Specifications

|                                  |                                                              |
|----------------------------------|--------------------------------------------------------------|
| Antenna Type                     | Sector                                                       |
| Band                             | Multiband                                                    |
| Color                            | Light Gray (RAL 7035)                                        |
| Grounding Type                   | RF connector 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 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 (1)       |
| Power Consumption, active state, maximum | 10 W                              |
| Power Consumption, idle state, maximum   | 2 W                               |

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|                          |                            |
|--------------------------|----------------------------|
| Protocol                 | 3GPP/AISG 2.0 (Single RET) |
| Dimensions               |                            |
| Width                    | 640 mm   25.197 in         |
| Depth                    | 235 mm   9.252 in          |
| Length                   | 2438 mm   95.984 in        |
| Net Weight, antenna only | 64 kg   141.096 lb         |

## Array Layout

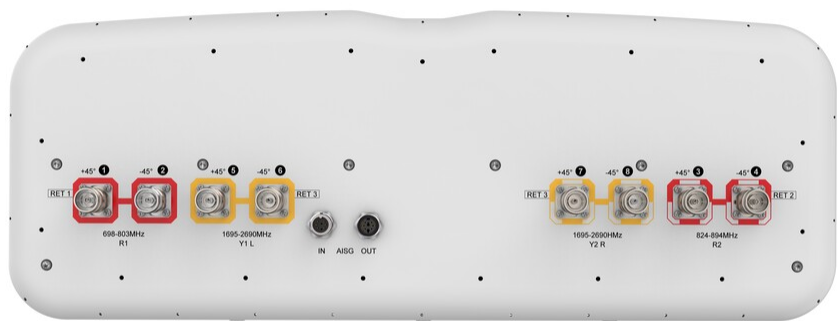
Left Right  
Bottom

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

| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID         |
|-------|------------|-------|------------|----------------------|
| R1    | 698-803    | 1-2   | 1          | CPxxxxxxxxxxxxxxxxR1 |
| R2    | 824-894    | 3-4   | 2          | CPxxxxxxxxxxxxxxxxR2 |
| Y1    | 1695-2690  | 5-6   | 3          | CPxxxxxxxxxxxxxxxxY1 |
| Y2    | 1695-2690  | 7-8   |            |                      |

## Port Configuration

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## Electrical Specifications

|                            |                                                 |
|----------------------------|-------------------------------------------------|
| Impedance                  | 50 ohm                                          |
| Operating Frequency Band   | 1695 – 2690 MHz   698 – 803 MHz   824 – 894 MHz |
| Polarization               | ±45°                                            |
| Total Input Power, maximum | 800 W @ 50 °C                                   |

## Electrical Specifications

| Frequency Band, MHz               | 698–803 | 824–894 | 1695–1880 | 1850–1990 | 1920–2200 | 2300–2690 |
|-----------------------------------|---------|---------|-----------|-----------|-----------|-----------|
| Gain, dBi                         | 18.3    | 19      | 20        | 20.3      | 20.8      | 21.7      |
| Beamwidth, Horizontal, degrees    | 35      | 31      | 34        | 34        | 33        | 27        |
| Beamwidth, Vertical, degrees      | 9.9     | 8.7     | 5.8       | 5.4       | 5.1       | 4.4       |
| Beam Tilt, degrees                | 0–10    | 0–10    | 2–12      | 2–12      | 2–12      | 2–12      |
| Horizontal Sidelobe, dB           | 21      | 20      | 19        | 17        | 17        | 16        |
| USLS (First Lobe), dB             | 17      | 18      | 18        | 17        | 18        | 20        |
| Front-to-Back Ratio at 180°, dB   | 32      | 36      | 34        | 35        | 37        | 36        |
| CPR at Boresight, dB              | 18      | 17      | 18        | 21        | 20        | 21        |
| Isolation, Cross Polarization, dB | 25      | 25      | 25        | 25        | 25        | 25        |

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

## Mechanical Specifications

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| Wind Loading @ Velocity, frontal | 954.0 N @ 150 km/h (214.5 lbf @ 150 km/h)   |
| Wind Loading @ Velocity, lateral | 355.0 N @ 150 km/h (79.8 lbf @ 150 km/h)    |
| Wind Loading @ Velocity, maximum | 1,434.0 N @ 150 km/h (322.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear    | 1,086.0 N @ 150 km/h (244.1 lbf @ 150 km/h) |
| Wind Speed, maximum              | 241 km/h (150 mph)                          |

## Packaging and Weights

|                |                      |
|----------------|----------------------|
| Width, packed  | 752 mm   29.606 in   |
| Depth, packed  | 382 mm   15.039 in   |
| Length, packed | 2590 mm   101.969 in |
| Weight, gross  | 88 kg   194.007 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.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| 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. |
| BSAMNT-M4 | – | Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.                            |

## \* Footnotes

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

