

VV-33A-R2VB



4-port sector antenna, 4x 1695–2690 MHz, 33°HPBW, 2x RETs

- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput
- Ideal for high gain corridor coverage or capacity optimization
- All Internal RET actuators are connected in "Cascaded SRET" configuration

General Specifications

| | |
|--|--|
| Antenna Type | Sector |
| Band | Single band |
| 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, mid band | 4 |
| RF Connector Quantity, total | 4 |

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 | Mid band (2) |
| Power Consumption, active state, maximum | 10 W |
| Power Consumption, idle state, maximum | 2 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|--------------|--------------------|
| Width | 498 mm 19.606 in |
|--------------|--------------------|

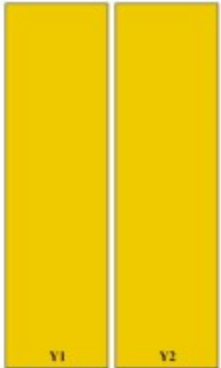
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| | |
|---------------------------------|---------------------|
| Depth | 197 mm 7.756 in |
| Length | 1500 mm 59.055 in |
| Net Weight, antenna only | 21.6 kg 47.62 lb |

Array Layout

| Array ID | Frequency (MHz) | RF Connector | HPBW | RET (SMT) | AISG No. | AISG RET UID |
|----------|-----------------|--------------|------|-----------|----------|----------------------|
| Y1 | 1695-2690 | 1 - 2 | 33° | 1 | AISG1 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 3 - 4 | 33° | 2 | AISG1 | CPxxxxxxxxxxxxxxxxY2 |

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



Port Configuration



Electrical Specifications

| | |
|-----------------------------------|-----------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2690 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 500 W |

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Electrical Specifications

| Frequency Band, MHz | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2500 | 2500–2690 |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 20.4 | 20.9 | 21.4 | 22 | 21.9 |
| Beamwidth, Horizontal, degrees | 38 | 33 | 30 | 25 | 26 |
| Beamwidth, Vertical, degrees | 6.7 | 6.3 | 5.8 | 5 | 4.7 |
| Beam Tilt, degrees | 2–12 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 17 | 20 | 19 | 20 | 18 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 28 | 28 |
| Isolation, Inter-band, dB | 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 |
| PIM, 3rd Order, 2 x 20 W, dBc | -150 | -150 | -150 | -150 | -150 |
| Input Power per Port, maximum, watts | 200 | 200 | 200 | 200 | 200 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 1695–1880 | 1850–1990 | 1920–2180 | 2300–2500 | 2500–2690 |
|--|-----------|-----------|-----------|-----------|-----------|
| Gain by all Beam Tilts, average, dBi | 19.9 | 20.6 | 21.2 | 21.7 | 21.6 |
| Gain by all Beam Tilts Tolerance, dB | ±0.7 | ±0.4 | ±0.5 | ±0.4 | ±0.5 |
| Beamwidth, Horizontal Tolerance, degrees | ±3.3 | ±2.2 | ±3.1 | ±1.6 | ±1.6 |
| Beamwidth, Vertical Tolerance, degrees | ±0.4 | ±0.3 | ±0.4 | ±0.2 | ±0.2 |
| CPR at Boresight, dB | 20 | 22 | 22 | 24 | 20 |

Mechanical Specifications

| | |
|----------------------------------|---|
| Wind Loading @ Velocity, frontal | 549.0 N @ 150 km/h (123.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 183.0 N @ 150 km/h (41.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 452.0 N @ 150 km/h (101.6 lbf @ 150 km/h) |

Packaging and Weights

| | |
|----------------|---------------------|
| Width, packed | 560 mm 22.047 in |
| Depth, packed | 280 mm 11.024 in |
| Length, packed | 1755 mm 69.095 in |

VV-33A-R2VB

Weight, gross

33.5 kg | 73.855 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.andrew.com/ProductCompliance

ROHS

Compliant

UK-ROHS

Compliant



* Footnotes

Performance Note

Severe environmental conditions may degrade optimum performance