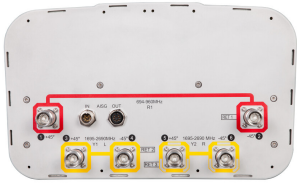


RVV-65A-R3



6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 65° HPBW, 3x RET

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Narrow vertical beamwidth over 700MHz

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 Location | Bottom |
| RF Connector Quantity, mid band | 4 |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 6 |

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 | Low band (1) Mid band (2) |
| Power Consumption, active state, maximum | 13 W |
| Power Consumption, idle state, maximum | 2 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

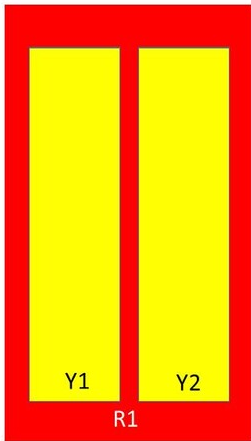
Dimensions

| | |
|--------------|-------------------|
| Width | 350 mm 13.78 in |
|--------------|-------------------|

RVV-65A-R3

| | |
|---------------------------------|---------------------|
| Depth | 208 mm 8.189 in |
| Length | 1400 mm 55.118 in |
| Net Weight, antenna only | 19.3 kg 42.549 lb |

Array Layout



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|----------------------|
| R1 | 694-960 | 1-2 | 1 | ANxxxxxxxxxxxxxxxxx1 |
| Y1 | 1695-2690 | 3-4 | 2 | ANxxxxxxxxxxxxxxxxx2 |
| Y2 | 1695-2690 | 5-6 | 3 | ANxxxxxxxxxxxxxxxxx3 |

Left Right
Bottom

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

Port Configuration



RVV-65A-R3

Electrical Specifications

| | |
|-----------------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1695 – 2690 MHz 694 – 960 MHz |
| Polarization | ±45° |
| Total Input Power, maximum | 800 W @ 50 °C |

Electrical Specifications

| | R1 | R1 | R1 | Y1,Y2 | Y1,Y2 | Y1,Y2 | Y1,Y2 |
|---|----------------|----------------|----------------|------------------|------------------|------------------|------------------|
| Frequency Band, MHz | 698–806 | 790–896 | 890–960 | 1695–1990 | 1920–2300 | 2300–2500 | 2490–2690 |
| RF Port | 1-2 | 1-2 | 1-2 | 3-6 | 3-6 | 3-6 | 3-6 |
| Gain at Mid Tilt, dBi | 14.1 | 14.6 | 14.7 | 17.3 | 17.8 | 18.2 | 18 |
| Beamwidth, Horizontal, degrees | 68 | 65 | 63 | 60 | 61 | 60 | 59 |
| Beamwidth, Vertical, degrees | 14.8 | 13.5 | 12.6 | 7.1 | 6.4 | 5.7 | 5.5 |
| Beam Tilt, degrees | 3–16 | 3–16 | 3–16 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 13 | 14 | 14 | 16 | 16 | 16 | 15 |
| Front-to-Back Ratio at 180°, dB | 29 | 30 | 31 | 34 | 37 | 36 | 29 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| Isolation, Inter-band, dB | 30 | 30 | 30 | 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 | -153 | -153 | -153 | -153 | -153 | -153 | -153 |
| Input Power per Port at 50°C, maximum, watts | 300 | 300 | 300 | 250 | 250 | 200 | 200 |

Electrical Specifications, BASTA

| | 698–806 | 790–896 | 890–960 | 1695–1990 | 1920–2300 | 2300–2500 | 2490–2690 |
|---|----------------|----------------|----------------|------------------|------------------|------------------|------------------|
| Frequency Band, MHz | 698–806 | 790–896 | 890–960 | 1695–1990 | 1920–2300 | 2300–2500 | 2490–2690 |
| Gain by all Beam Tilts, average, dBi | 14 | 14.5 | 14.6 | 17.2 | 17.7 | 18.1 | 17.9 |
| Gain by all Beam Tilts Tolerance, dB | ±0.3 | ±0.3 | ±0.3 | ±0.7 | ±0.4 | ±0.3 | ±0.4 |
| Beamwidth, Horizontal Tolerance, degrees | ±2 | ±2 | ±1 | ±4 | ±4 | ±5 | ±3 |
| Beamwidth, Vertical Tolerance, degrees | ±0.9 | ±0.9 | ±0.8 | ±0.6 | ±0.5 | ±0.2 | ±0.3 |
| USLS, beampeak to 20° above | 15 | 15 | 14 | 14 | 15 | 15 | 13 |

RVV-65A-R3

beampeak, dB

| | | | | | | | |
|--|----|----|----|----|----|----|----|
| Front-to-Back Total Power at 180° ± 30°, dB | 24 | 23 | 23 | 27 | 26 | 26 | 24 |
| CPR at Boresight, dB | 16 | 16 | 17 | 20 | 20 | 20 | 15 |
| CPR at Sector, dB | 11 | 10 | 9 | 11 | 10 | 6 | 3 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 231.0 N @ 150 km/h (51.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 222.0 N @ 150 km/h (49.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 520.0 N @ 150 km/h (116.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 244.0 N @ 150 km/h (54.9 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|---------------------|
| Width, packed | 447 mm 17.598 in |
| Depth, packed | 354 mm 13.937 in |
| Length, packed | 1544 mm 60.787 in |
| Weight, gross | 31.7 kg 69.886 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Above maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| ROHS | Compliant/Exempted |
| UK-ROHS | Compliant/Exempted |



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 |
|-------------------------|---|