

RV4-65D-R5-V4



10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, Int 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

OBSOLETE

This product was discontinued on: **March 27, 2020**

Replaced By:

RV4-65D-R5-V6

10-port sector antenna, 2x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 5x RET

General Specifications

| | |
|---|--|
| Antenna Type | Sector |
| Band | Multiband |
| Grounding Type | RF connector inner conductor and body grounded to reflector and mounting bracket |
| Performance Note | Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN |
| 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 | 8 |
| RF Connector Quantity, low band | 2 |
| RF Connector Quantity, total | 10 |

Remote Electrical Tilt (RET) Information

| | |
|--------------------------------|-----------------------------------|
| RET Hardware | CommRET v1 |
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 1 female 1 male |

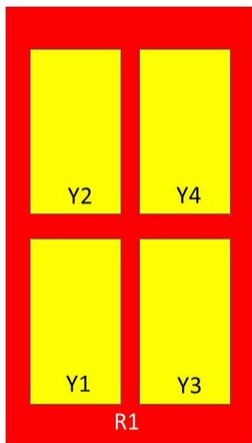
RV4-65D-R5-V4

| | |
|--|------------------------------|
| Input Voltage | 10–30 Vdc |
| Internal RET | High band (4) Low band (1) |
| Power Consumption, idle state, maximum | 1 W |
| Power Consumption, normal conditions, maximum | 8 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|---|----------------------|
| Width | 350 mm 13.78 in |
| Depth | 208 mm 8.189 in |
| Length | 2688 mm 105.827 in |
| Net Weight, without mounting kit | 32 kg 70.548 lb |

Array Layout



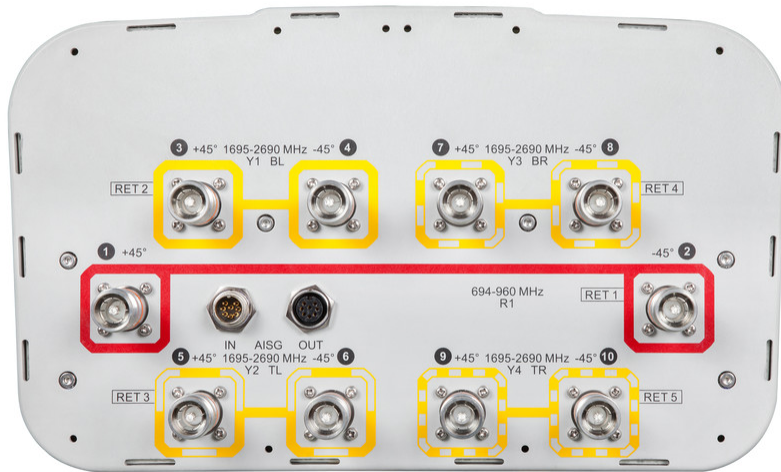
| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|----------------------|
| R1 | 694-960 | 1-2 | 1 | CPxxxxxxxxxxxxxxxxR1 |
| Y1 | 1695-2690 | 3-4 | 2 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 5-6 | 3 | CPxxxxxxxxxxxxxxxxY2 |
| Y3 | 1695-2690 | 7-8 | 4 | CPxxxxxxxxxxxxxxxxY3 |
| Y4 | 1695-2690 | 9-10 | 5 | CPxxxxxxxxxxxxxxxxY4 |

Left Right
Bottom

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

Port Configuration

RV4-65D-R5-V4



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

| Frequency Band, MHz | 694–790 | 790–890 | 890–960 | 1695–1920 | 1920–2200 | 2300–2500 | 2500–2690 |
|--|----------|----------|----------|-----------|-----------|-----------|-----------|
| Gain, dBi | 16.6 | 17.1 | 17.4 | 16.8 | 17.5 | 18.1 | 18 |
| Beamwidth, Horizontal, degrees | 67 | 65 | 63 | 62 | 62 | 62 | 62 |
| Beamwidth, Vertical, degrees | 8.2 | 7.4 | 6.8 | 7.5 | 6.5 | 5.7 | 5.4 |
| Beam Tilt, degrees | 0–10 | 0–10 | 0–10 | 2–12 | 2–12 | 2–12 | 2–12 |
| USLS (First Lobe), dB | 19 | 24 | 22 | 15 | 16 | 15 | 15 |
| Front-to-Back Ratio at 180°, dB | 32 | 35 | 38 | 31 | 35 | 37 | 36 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 28 | 28 | 28 | 28 |
| Isolation, Inter-band, dB | 30 | 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 | 1.5 14.0 |

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

Electrical Specifications, BASTA

| Frequency Band, MHz | 694–790 | 790–890 | 890–960 | 1695–1920 | 1920–2200 | 2300–2500 | 2500–2690 |
|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Gain by all Beam Tilts, average, dBi | 16.4 | 16.9 | 17.2 | 16.3 | 17.1 | 17.7 | 17.6 |
| Gain by all Beam Tilts Tolerance, dB | ±0.3 | ±0.3 | ±0.2 | ±0.7 | ±0.6 | ±0.6 | ±0.6 |
| Gain by Beam Tilt, average, dBi | 0° 16.2 5° 16.5 10° 16.5 | 0° 16.6 5° 17.0 10° 17.3 | 0° 17.0 5° 17.4 10° 17.2 | 2° 16.2 7° 16.4 12° 16.2 | 2° 16.8 7° 17.2 12° 17.0 | 2° 17.3 7° 17.8 12° 17.7 | 2° 17.3 7° 17.7 12° 17.4 |
| Beamwidth, Horizontal Tolerance, degrees | ±1.1 | ±1.5 | ±1.4 | ±3.4 | ±2.1 | ±3.5 | ±3.5 |
| Beamwidth, Vertical Tolerance, degrees | ±0.5 | ±0.4 | ±0.3 | ±0.5 | ±0.5 | ±0.3 | ±0.3 |
| USLS, beampeak to 20° above beampeak, dB | 16 | 16 | 17 | 13 | 14 | 14 | 13 |
| Front-to-Back Total Power at 180° ± 30°, dB | 26 | 25 | 25 | 27 | 28 | 28 | 28 |
| CPR at Boresight, dB | 17 | 20 | 20 | 18 | 21 | 19 | 17 |
| CPR at Sector, dB | 11 | 10 | 10 | 10 | 10 | 8 | 7 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 477.0 N @ 150 km/h (107.2 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 409.0 N @ 150 km/h (91.9 lbf @ 150 km/h) |
| Wind Loading @ Velocity, maximum | 1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 506.0 N @ 150 km/h (113.8 lbf @ 150 km/h) |
| Wind Speed, maximum | 241 km/h (150 mph) |

Packaging and Weights

| | |
|-----------------------|----------------------|
| Width, packed | 460 mm 18.11 in |
| Depth, packed | 350 mm 13.78 in |
| Length, packed | 2830 mm 111.417 in |
| Weight, gross | 48.5 kg 106.924 lb |

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|-----------------------|
|---------------|-----------------------|

RV4-65D-R5-V4

| | |
|---------------|--|
| CE | Compliant with the relevant CE product directives |
| 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 |
|-------------------------|---|

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.

Product Classification

Product Type Downtilt mounting kit

General Specifications

Application Outdoor

Color Silver

Dimensions

Compatible Diameter, maximum 115 mm | 4.528 in

Compatible Diameter, minimum 60 mm | 2.362 in

Weight, net 6.2 kg | 13.669 lb

Material Specifications

Material Type Galvanized steel

Packaging and Weights

Included Brackets | Hardware

Packaging quantity 1

Weight, gross 6.4 kg | 14.11 lb

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CE | Compliant with the relevant CE product directives |
| 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 |

BSAMNT-3

