

R2V4PX306R



12-port sector antenna, 4x 698–960 and 8x 1710–2690 MHz, 65° HPBW, 6x RET with manual override. Bands cascaded SRET (Antenna 1 and Antenna 2).

OBSOLETE

This product was discontinued on: **March 31, 2022**

Replaced By:

RRV4-65A-R6

12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x 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 |
| Radome Material | ASA, UV stabilized |
| Radiator Material | Brass Low loss circuit board |
| Reflector Material | Aluminum |
| RF Connector Interface | 7-16 DIN Female |
| RF Connector Location | Bottom |
| RF Connector Quantity, high band | 8 |
| RF Connector Quantity, low band | 4 |
| RF Connector Quantity, total | 12 |

Remote Electrical Tilt (RET) Information

| | |
|--------------------------------|-----------------------------------|
| RET Interface | 8-pin DIN Female 8-pin DIN Male |
| RET Interface, quantity | 2 female 2 male |
| Input Voltage | 10–30 Vdc |

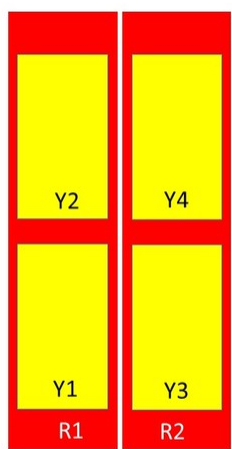
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| | |
|--|------------------------------|
| Internal RET | High band (4) Low band (2) |
| Power Consumption, idle state, maximum | 2 W |
| Power Consumption, normal conditions, maximum | 13 W |
| Protocol | 3GPP/AISG 2.0 (Single RET) |

Dimensions

| | |
|---|---------------------|
| Width | 641 mm 25.236 in |
| Depth | 244 mm 9.606 in |
| Length | 1607 mm 63.268 in |
| Net Weight, without mounting kit | 49 kg 108.026 lb |

Array Layout



| Array | Freq (MHz) | Conns | RET (SRET) | AISG RET UID |
|-------|------------|-------|------------|----------------------|
| R1 | 698-960 | 1-2 | 1 | CPxxxxxxxxxxxxxxxxR1 |
| R2 | 698-960 | 3-4 | 2 | CPxxxxxxxxxxxxxxxxR2 |
| Y1 | 1710-2690 | 5-6 | 3 | CPxxxxxxxxxxxxxxxxY1 |
| Y2 | 1710-2690 | 7-8 | 4 | CPxxxxxxxxxxxxxxxxY2 |
| Y3 | 1710-2690 | 9-10 | 5 | CPxxxxxxxxxxxxxxxxY3 |
| Y4 | 1710-2690 | 11-12 | 6 | CPxxxxxxxxxxxxxxxxY4 |

Left Bottom Right

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

Electrical Specifications

| | |
|---------------------------------|---------------------------------|
| Impedance | 50 ohm |
| Operating Frequency Band | 1710 – 2690 MHz 698 – 960 MHz |
| Polarization | ±45° |

Electrical Specifications

| Frequency Band, MHz | 698–790 | 790–890 | 890–960 | 1710–1920 | 1920–2170 | 2300–2690 |
|-------------------------------|---------|---------|---------|-----------|-----------|-----------|
| Gain, dBi | 14.2 | 14.8 | 15.1 | 15.1 | 16.4 | 16.9 |
| Beamwidth, Horizontal, | 65 | 63 | 60 | 62 | 57 | 58 |

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degrees

| | | | | | | |
|---|-------------|-------------|-------------|------------|------------|------------|
| Beamwidth, Vertical, degrees | 16.3 | 14.5 | 13.3 | 13.7 | 12.1 | 9.9 |
| Beam Tilt, degrees | 0–10 | 0–10 | 0–10 | 0–10 | 0–10 | 0–10 |
| USLS (First Lobe), dB | 18 | 18 | 18 | 18 | 18 | 18 |
| Front-to-Back Ratio at 180°, dB | 32 | 31 | 29 | 29 | 32 | 32 |
| CPR at Boresight, dB | 23 | 16 | 15 | 22 | 21 | 14 |
| CPR at Sector, dB | 15 | 13 | 11 | 11 | 10 | 3 |
| Isolation, Cross Polarization, dB | 25 | 25 | 25 | 25 | 25 | 25 |
| Isolation, Inter-band, dB | 30 | 30 | 30 | 30 | 30 | 30 |
| VSWR Return loss, dB | 1.43 15.0 | 1.43 15.0 | 1.43 15.0 | 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 | -150 |
| Input Power per Port, maximum, watts | 300 | 300 | 300 | 250 | 250 | 250 |

Electrical Specifications, BASTA

| Frequency Band, MHz | 698–790 | 790–890 | 890–960 | 1710–1920 | 1920–2170 | 2300–2690 |
|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| Gain by all Beam Tilts, average, dBi | 13.8 | 14.4 | 14.8 | 14.9 | 15.9 | 16.5 |
| Gain by all Beam Tilts Tolerance, dB | ±0.5 | ±0.3 | ±0.2 | ±0.7 | ±0.4 | ±0.6 |
| Gain by Beam Tilt, average, dBi | 0° 13.8 5° 13.8 10° 13.8 | 0° 14.4 5° 14.4 10° 14.4 | 0° 14.8 5° 14.8 10° 14.8 | 0° 15.0 5° 14.9 10° 14.8 | 0° 16.0 5° 15.9 10° 15.6 | 0° 16.6 5° 16.6 10° 16.3 |
| Beamwidth, Horizontal Tolerance, degrees | ±2.3 | ±2.3 | ±2.4 | ±5 | ±2.6 | ±5.3 |
| Beamwidth, Vertical Tolerance, degrees | ±1 | ±0.8 | ±0.4 | ±1 | ±1 | ±0.9 |
| USLS, beampeak to 20° above beampeak, dB | 18 | 18 | 18 | 18 | 18 | 18 |
| Front-to-Back Total Power at 180° ± 30°, dB | 26 | 26 | 24 | 29 | 31 | 31 |
| CPR at Boresight, dB | 22 | 16 | 15 | 22 | 21 | 14 |
| CPR at Sector, dB | 15 | 12 | 11 | 11 | 10 | 3 |

Mechanical Specifications

| | |
|---|---|
| Wind Loading @ Velocity, frontal | 1,296.0 N @ 150 km/h (291.4 lbf @ 150 km/h) |
| Wind Loading @ Velocity, lateral | 274.0 N @ 150 km/h (61.6 lbf @ 150 km/h) |
| Wind Loading @ Velocity, rear | 1,367.0 N @ 150 km/h (307.3 lbf @ 150 km/h) |

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Wind Speed, maximum 250 km/h (155 mph)

Packaging and Weights

Width, packed 739 mm | 29.095 in

Depth, packed 347 mm | 13.661 in

Length, packed 1810 mm | 71.26 in

Weight, gross 73 kg | 160.937 lb

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| 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 |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant/Exempted |
| UK-ROHS | Compliant/Exempted |



Included Products

- ATCB-B01-C50 – AISG RET Control Cable, 0.5 m
- T-041-GL-E – Adjustable Tilt Pipe Mounting Kit for 2.0"-4.5" (60-115mm) OD round members for panel antennas. Includes 2 clamp sets.

* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance