# R2V4PX306R-V2

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, 2023

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** | 4.3-10 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

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|---|---|
| **RET Interface** | 8-pin DIN Female \| 8-pin DIN Male |
| **RET Interface, quantity** | 2 female \| 2 male |
| **Input Voltage** | 10–30 Vdc |
| **Internal RET** | High band (4) \| Low band (2) |
| **Power Consumption, idle state, maximum** | 2 W |
| **Power Consumption, normal conditions, maximum** | 13 W |

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|---|---|
| **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** | 48.2 kg \| 106.263 lb |

## Port Configuration


## 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 | 14.6 | 15 | 15.4 | 16.3 | 16.9 |
| **Beamwidth, Horizontal, degrees** | 65 | 63 | 60 | 62 | 57 | 58 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **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** | 34 | 32 | 30 | 32 | 35 | 37 |
| **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<br>5 ° \| 13.8<br>10 ° \| 13.8 | 0 ° \| 14.4<br>5 ° \| 14.4<br>10 ° \| 14.4 | 0 ° \| 14.8<br>5 ° \| 14.8<br>10 ° \| 14.8 | 0 ° \| 15.0<br>5 ° \| 14.9<br>10 ° \| 14.8 | 0 ° \| 16.0<br>5 ° \| 15.9<br>10 ° \| 15.6 | 0 ° \| 16.6<br>5 ° \| 16.6<br>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** | 23 | 16 | 15 | 22 | 21 | 14 |
| **CPR at Sector, dB** | 15 | 13 | 11 | 11 | 10 | 3 |

## Mechanical Specifications

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|---|---|
| **Mechanical Tilt Range** | 0°–12° |
| **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) |
| **Wind Speed, maximum** | 250 km/h (155 mph) |

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## 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** | 72.2 kg \| 159.174 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 |

## 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

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