# RRV4-6585B-R6H4

12-port sector antenna, 4x 694–960MHz, 65° HPBW and 8x 1695–2690 MHz, 85° HPBW, 6x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Antenna shape optimized for wind load reduction

## 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, high band** | 8 |
| **RF Connector Quantity, low band** | 4 |
| **RF Connector Quantity, total** | 12 |

## Remote Electrical Tilt (RET) Information

| | |
|---|---|
| **RET Hardware** | CommRET v2 |
| **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, active state, maximum** | 8 W |
| **Power Consumption, idle state, maximum** | 1 W |
| **Protocol** | 3GPP/AISG 2.0 |

## Dimensions

| | |
|---|---|
| **Width** | 498 mm \| 19.606 in |

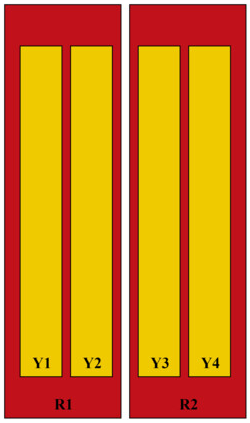


©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 9, 2024

# RRV4-6585B-R6H4

| | |
|---|---|
| **Depth** | 197 mm \| 7.756 in |
| **Length** | 2180 mm \| 85.827 in |
| **Net Weight, antenna only** | 42 kg \| 92.594 lb |

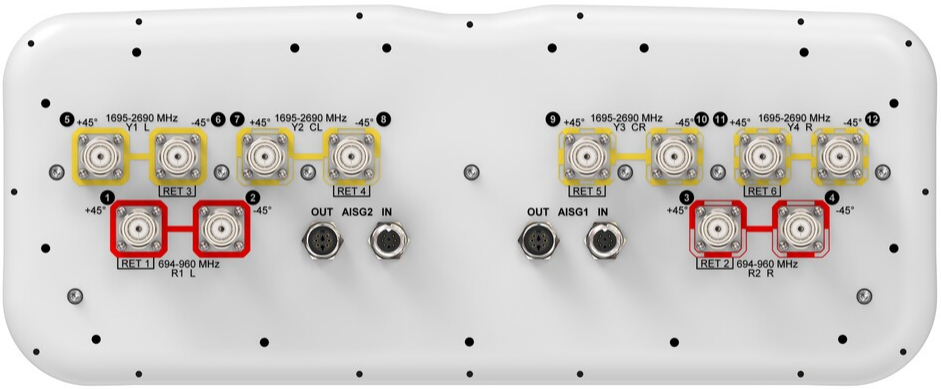
## Array Layout




| Array ID | Frequency (MHz) | RF Connector | HPBW | RET (SRET) | AISG No. | AISG RET UID |
|---|---|---|---|---|---|---|
| R1 | 694-960 | 1 - 2 | 65° | 1 | AISG1 | CPxxxxxxxxxxxxxxxR1 |
| R2 | 694-960 | 3 - 4 | 65° | 2 | AISG1 | CPxxxxxxxxxxxxxxxR2 |
| Y1 | 1695-2690 | 5 - 6 | 85° | 3 | AISG1 | CPxxxxxxxxxxxxxxxY1 |
| Y2 | 1695-2690 | 7 - 8 | 85° | 4 | AISG1 | CPxxxxxxxxxxxxxxxY2 |
| Y3 | 1695-2690 | 9 - 10 | 85° | 5 | AISG1 | CPxxxxxxxxxxxxxxxY3 |
| Y4 | 1695-2690 | 11 - 12 | 85° | 6 | AISG1 | CPxxxxxxxxxxxxxxxY4 |

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

## Port Configuration




## Electrical Specifications



©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 9, 2024

# RRV4-6585B-R6H4

| | |
|---|---|
| **Impedance** | 50 ohm |
| **Operating Frequency Band** | 1695 – 2690 MHz \| 694 – 960 MHz |
| **Polarization** | ±45° |
| **Total Input Power, maximum** | 900 W @ 50 °C |

## Electrical Specifications

| **Frequency Band, MHz** | **694–790** | **790–862** | **870–960** | **1710–1880** | **1920–2170** | **2490–2690** |
|---|---|---|---|---|---|---|
| **Gain, dBi** | 15.4 | 15.5 | 16 | 17.2 | 18.2 | 19 |
| **Beamwidth, Horizontal, degrees** | 71 | 64 | 63 | 83 | 77 | 66 |
| **Beamwidth, Vertical, degrees** | 10.3 | 9.3 | 8.6 | 5.8 | 5.2 | 4.2 |
| **Beam Tilt, degrees** | 2–14 | 2–14 | 2–14 | 2–12 | 2–12 | 2–12 |
| **USLS (First Lobe), dB** | 17 | 17 | 20 | 17 | 15 | 18 |
| **Front-to-Back Ratio at 180°, dB** | 32 | 31 | 30 | 34 | 28 | 32 |
| **Isolation, Cross Polarization, dB** | 28 | 28 | 28 | 25 | 25 | 25 |
| **Isolation, Inter-band, dB** | 28 | 28 | 28 | 27 | 27 | 27 |
| **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 |
| **PIM, 3rd Order, 2 x 20 W, dBc** | -153 | -153 | -153 | -153 | -153 | -153 |
| **Input Power per Port at 50°C, maximum, watts** | 250 | 250 | 250 | 200 | 200 | 150 |

## Mechanical Specifications

| | |
|---|---|
| **Wind Loading @ Velocity, frontal** | 760.0 N @ 150 km/h (170.9 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, lateral** | 233.0 N @ 150 km/h (52.4 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, maximum** | 911.0 N @ 150 km/h (204.8 lbf @ 150 km/h) |
| **Wind Loading @ Velocity, rear** | 523.0 N @ 150 km/h (117.6 lbf @ 150 km/h) |
| **Wind Speed, maximum** | 241 km/h (150 mph) |

## Packaging and Weights

| | |
|---|---|
| **Width, packed** | 565 mm \| 22.244 in |
| **Depth, packed** | 309 mm \| 12.165 in |
| **Length, packed** | 2367 mm \| 93.189 in |
| **Weight, gross** | 56.5 kg \| 124.561 lb |



©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 9, 2024

# RRV4-6585B-R6H4

## 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-4 | – | 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 |



©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: September 9, 2024