## RRZZVV-65B-R6



## l2-port sector antenna, 4x 694-960, 4x 1427-2690 and 4x 1695-2690 $\mathrm{MHz}, 65^{\circ} \mathrm{HPBW}, 6 \times$ 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
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios


## OBSOLETE

This product was discontinued on: March 31, 2023
Replaced By:
12-port sector antenna, $4 \times 694-960,4 \times 1427-2690$ and $4 x 1695-2690 \mathrm{MHz}, 65^{\circ} \mathrm{HPBW}, 6 \times$ 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 | 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 |

## RRZZVV-65B-R6

Input Voltage

## Internal RET

Power Consumption, idle state, maximum
Power Consumption, normal conditions, maximum
Protocol

## Dimensions

Width
Depth
Length
Net Weight, without mounting kit
$10-30 \mathrm{Vdc}$
High band (4) | Low band (2)
1 W
8 W
3GPP/AISG 2.0 (Single RET)

498 mm | 19.606 in
197 mm | 7.756 in
2100 mm | 82.677 in
$41.4 \mathrm{~kg} \mathrm{\mid} 91.271 \mathrm{lb}$

Array Layout

|  |  | Array | Freq (MHz) | Conns | $\begin{gathered} \text { RET } \\ \text { (SRET) } \end{gathered}$ | AISG RET UID |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | R1 | 694-960 | 1-2 | 1 | CPxxxxxxxxxxxxxxxR1 |
| Y2 | Y4 | R2 | 694-960 | 3-4 | 2 | CPxxxxxxxxxxxxxxxrR2 |
|  |  | Y1 | 1695-2690 | 5-6 | 3 | CPxxxxxxxxxxxxxxxyY1 |
|  |  | Y2 | 1427-2690 | 7-8 | 4 | CPxxxxxxxxxxxxxxxy2 |
| Y1 | Y3 | Y3 | 1695-2690 | 9-10 | 5 | CPxxxxxxxxxxxxxxxy 3 |
| R1 | R2 | Y4 | 1427-2690 | 11-12 | 6 | CPxxxxxxxxxxxxxxxy 4 |
| Left | Right | (Sizes of colored boxes are not true depictions of array sizes) |  |  |  |  |

## Port Configuration

## RRZZVV-65B-R6



## Electrical Specifications

## Impedance

Operating Frequency Band

## Polarization

Total Input Power, maximum

## 50 ohm

$1427-2690 \mathrm{MHz}$ | $1695-2690 \mathrm{MHz}$ | $694-960 \mathrm{MHz}$
$\pm 45^{\circ}$
900 W@ $50^{\circ} \mathrm{C}$

## Electrical Specifications

| Frequency Band, MHz | 694-790 | 790-890 | 890-960 | 1427-1 | 695- | 0 | 0 | 500-2690 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gain, dBi | 14.5 | 14.9 | 15.3 | 14.4 | 16.2 | 16.9 | 17.5 | 17.2 |
| Beamwidth, Horizontal, degrees | 71 | 66 | 61 | 67 | 59 | 60 | 56 | 60 |
| Beamwidth, Vertical, degrees | 10.8 | 9.6 | 8.8 | 10.9 | 9.2 | 8.3 | 7.1 | 6.7 |
| Beam Tilt, degrees | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 | 2-12 |
| USLS (First Lobe), dB | 18 | 19 | 18 | 16 | 14 | 15 | 16 | 15 |
| Front-to-Back Ratio at $\mathbf{1 8 0}^{\circ}$, dB | 33 | 31 | 31 | 33 | 34 | 34 | 34 | 31 |
| Isolation, Cross Polarization, dB | 28 | 28 | 28 | 26 | 27 | 27 | 27 | 27 |
| Isolation, Inter-band, dB | 28 | 28 | 28 | 27 | 28 | 28 | 28 | 28 |
| VSWR \| Return loss, dB | 1.5\|14.0 | 1.5114 .0 | 1.5\|14.0 | 1.5114 .0 | 1.5114 .0 | 1.5\|14.0 | $1.5 \mid 14.0$ | 1.5\|14.0 |


| PIM, 3rd Order, $2 \times 20$ W, dBc | -150 | -150 | -150 | -150 | -150 | -150 | -150 | -150 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Input Power per Port at $50^{\circ} \mathrm{C}$, maximum, watts | 300 | 300 | 300 | 250 | 250 | 250 | 200 | 200 |

## Electrical Specifications, BASTA

| Frequency Band, MHz | 694-790 | 790-890 | 890-960 | 1427- | 695 | 20- | 300 | 2500-2690 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gain by all Beam Tilts, average, dBi | 14.2 | 14.6 | 14.9 | 13.9 | 15.6 | 16.5 | 17.1 | 16.7 |
| Gain by all Beam Tilts Tolerance, dB | $\pm 0.4$ | $\pm 0.4$ | $\pm 0.6$ | $\pm 0.5$ | $\pm 0.9$ | $\pm 0.4$ | $\pm 0.5$ | $\pm 0.7$ |
| Gain by Beam Tilt, average, dBi | $\begin{aligned} & 2^{\circ} \mid 14.3 \\ & 7^{\circ} \mid 14.3 \\ & 1^{\circ} \mid 14.0 \end{aligned}$ | $\begin{aligned} & 2^{\circ} \mid 14.6 \\ & 7^{\circ} \mid 14.7 \\ & 12^{\circ} \mid 14.3 \end{aligned}$ | $\begin{aligned} & 2^{\circ} \mid 15.0 \\ & 7^{\circ} \mid 15.0 \\ & 1^{\circ} \mid 144.5 \end{aligned}$ | $\begin{aligned} & 2^{\circ} \mid 13.8 \\ & 7^{\circ} \mid 13.9 \\ & 1^{\circ} \mid 13.8 \end{aligned}$ | $\begin{aligned} & 2^{\circ} \mid 15.5 \\ & 7^{\circ} \mid 15.7 \\ & 1^{\circ} \cdot 115.6 \end{aligned}$ | $\begin{aligned} & 2^{\circ} \mid 16.3 \\ & 7^{\circ} \mid 16.5 \\ & 1^{\circ} \circ 16.5 \end{aligned}$ | $\begin{aligned} & 2^{\circ} \mid 16.8 \\ & 7^{\circ} \mid 17.2 \\ & 1^{\circ} 2^{\circ} \mid 17.0 \end{aligned}$ | $\begin{aligned} & 2^{\circ} \mid 16.4 \\ & 7^{\circ} \mid 16.8 \\ & 1^{\circ} \mid 16.7 \end{aligned}$ |
| Beamwidth, Vertical <br> Tolerance, degrees | $\pm 0.8$ | $\pm 0.8$ | $\pm 0.6$ | $\pm 0.7$ | $\pm 0.8$ | $\pm 0.8$ | $\pm 0.6$ | $\pm 0.7$ |
| USLS, beampeak to $20^{\circ}$ above beampeak, dB | 17 | 17 | 16 | 13 | 12 | 13 | 14 | 13 |
| Front-to-Back Total Power at $180^{\circ} \pm 30^{\circ}, \mathrm{dB}$ | 21 | 21 | 22 | 25 | 29 | 28 | 27 | 26 |
| CPR at Boresight, dB | 21 | 22 | 22 | 16 | 18 | 20 | 18 | 16 |

## Mechanical Specifications

## Mechanical Tilt Range

Wind Loading @ Velocity, frontal
Wind Loading @ Velocity, lateral
Wind Loading @ Velocity, maximum
Wind Loading @ Velocity, rear
Wind Speed, maximum
$0^{\circ}-12^{\circ}$
803.0 N @ 150 km/h (180.5 Ibf @ 150 km/h) 275.0 N @ 150 km/h (61.8 lbf @ 150 km/h) 1,040.0 N @ 150 km/h (233.8 lbf @ 150 km/h) 661.0 N @ 150 km/h (148.6 lbf @ 150 km/h) 241 km/h (150 mph)

565 mm | 22.244 in
368 mm | 14.488 in
2279 mm | 89.724 in
55.2 kg | 121.695 lb

## Regulatory Compliance/Certifications

## Agency

Classification
CHINA-ROHS
Above maximum concentration value

## RRZZVV-65B-R6

ISO 9001:2015
ROHS
UK-ROHS 9001:2015

Designed, manufactured and/or distributed under this quality management system
Compliant/Exempted
Compliant/Exempted

## Included Products

- 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


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

Compatible Diameter, minimum
Weight, net
Material Specifications

## Material Type

## Packaging and Weights

Included Brackets | Hardware
Packaging quantity ..... 1
Regulatory Compliance/Certifications
Agency

CHINA-ROHS
ISO 9001:2015
REACH-SVHC
ROHS
UK-ROHS

## Classification

Below maximum concentration value
Designed, manufactured and/or distributed under this quality management system
Compliant as per SVHC revision on www.commscope.com/ProductCompliance
Compliant
Compliant

ISO
H14
9001:2015

