

# RRV4-65B-R6H4VB



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

- All Internal RET actuators are connected in "Cascaded SRET" configuration
- Array configuration provides capability for 4T4R (4x MIMO) on Low band and Dual 4T4R (4x MIMO) on High band
- Non-stacked high band array design provides higher gain and narrower vertical beamwidth than traditional antenna designs

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage
<b>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Aluminum
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

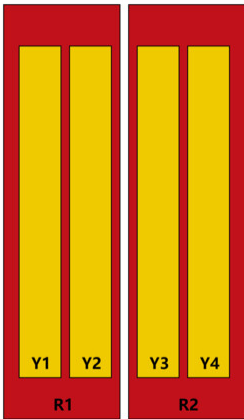
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (2)   Mid band (4)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

# RRV4-65B-R6H4VB

## Dimensions

<b>Width</b>	499 mm   19.646 in
<b>Depth</b>	199 mm   7.835 in
<b>Length</b>	2000 mm   78.74 in
<b>Net Weight, antenna only</b>	34.2 kg   75.398 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	CPxxxxxxxxxxxxR1
R2	694-960	3 - 4	65°	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1695-2690	5 - 6	65°	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1695-2690	7 - 8	65°	4	AISG1	CPxxxxxxxxxxxxY2
Y3	1695-2690	9 - 10	65°	5	AISG1	CPxxxxxxxxxxxxY3
Y4	1695-2690	11 - 12	65°	6	AISG1	CPxxxxxxxxxxxxY4

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

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°

# RRV4-65B-R6H4VB

Total Input Power, maximum 1,000 W

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4	Y1-Y4
Frequency Band, MHz	694–806	790–896	880–960	1695–1880	1850–1990	1920–2200	2300–2490	2500–2690
RF Port	1-4	1-4	1-4	5-12	5-12	5-12	5-12	5-12
Gain, dBi	14.9	15.3	15.5	17.1	17.2	17.3	17.7	18
Beamwidth, Horizontal, degrees	62	63	64	70	67	68	63	58
Beamwidth, Vertical, degrees	12.4	11.1	10.4	6.6	6.3	6	5.2	4.7
Beam Tilt, degrees	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	19	18	18	16	17	20	22	18
Front-to-Back Ratio, Copolarization 180° ± 30°, dB	26	27	28	28	28	28	28	29
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25	25	25
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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150	-150	-150
Input Power per Port, maximum, watts	250	250	250	200	200	200	200	200

## Mechanical Specifications

Wind Loading @ Velocity, frontal	577.0 N @ 150 km/h (129.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	276.0 N @ 150 km/h (62.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	1,023.0 N @ 150 km/h (230.0 lbf @ 150 km/h)
Wind Speed, maximum	200 km/h (124 mph)

## Packaging and Weights

Width, packed	570 mm   22.441 in
Depth, packed	275 mm   10.827 in
Length, packed	2280 mm   89.764 in
Weight, gross	45.4 kg   100.09 lb

## Regulatory Compliance/Certifications

Agency	Classification
--------	----------------

# RRV4-65B-R6H4VB

---

CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant
UK-ROHS	Compliant



## \* Footnotes

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