

# RVV-45A-R3



6-port sector antenna, 2x 694–960 and 4x 1695–2690 MHz, 45° HPBW, 3x RET

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Narrow beamwidth capacity antenna for higher level of densification and enhanced data throughput

## General Specifications

<b>Antenna Type</b>	Sector
<b>Band</b>	Multiband
<b>Grounding Type</b>	RF connector inner conductor and body grounded to reflector and mounting bracket
<b>Performance Note</b>	Outdoor usage   Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	4
<b>RF Connector Quantity, low band</b>	2
<b>RF Connector Quantity, total</b>	6

## Remote Electrical Tilt (RET) Information

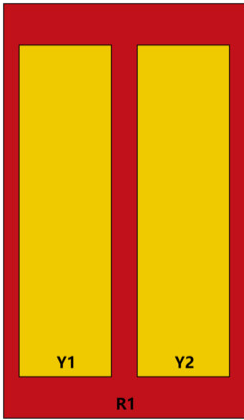
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	Low band (1)   Mid band (2)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>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

## Dimensions

<b>Width</b>	457 mm   17.992 in
<b>Depth</b>	178 mm   7.008 in
<b>Length</b>	1399 mm   55.079 in
<b>Net Weight, antenna only</b>	26.1 kg   57.541 lb

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## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	RET UID
R1	694-960	1 - 2	1	AISG1	ANxxxxxxxxxxxxx1.1
Y1	1695-2690	3 - 4	2	AISG1	ANxxxxxxxxxxxxx1.2
Y2	1695-2690	5 - 6	3	AISG1	ANxxxxxxxxxxxxx1.3

(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°
<b>Total Input Power, maximum</b>	550 W @ 50 °C

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## Electrical Specifications

	R1	R1	R1	Y1,Y2	Y1,Y2	Y1,Y2
<b>Frequency Band, MHz</b>	<b>694–790</b>	<b>790–890</b>	<b>890–960</b>	<b>1695–1920</b>	<b>1920–2180</b>	<b>2300–2690</b>
<b>RF Port</b>	1,2	1,2	1,2	3-6	3-6	3-6
<b>Gain, dBi</b>	15.5	16.1	16.5	18.8	19.3	19.6
<b>Beamwidth, Horizontal, degrees</b>	47	44	40	45	40	34
<b>Beamwidth, Vertical, degrees</b>	17.4	15.6	14.5	6.9	6.3	5.4
<b>Beam Tilt, degrees</b>	2–18	2–18	2–18	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	20	20	17	14	15	16
<b>Front-to-Back Ratio at 180°, dB</b>	30	32	31	37	36	36
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	22	21	22	28	29	26
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25
<b>VSWR   Return loss, dB</b>	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	200

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	159.0 N @ 150 km/h (35.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	788.0 N @ 150 km/h (177.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	692.0 N @ 150 km/h (155.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	608 mm   23.937 in
<b>Depth, packed</b>	346 mm   13.622 in
<b>Length, packed</b>	1542 mm   60.709 in
<b>Weight, gross</b>	41.1 kg   90.61 lb

## Regulatory Compliance/Certifications

# RVV-45A-R3

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## Agency

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

## Classification

Above maximum concentration value  
Designed, manufactured and/or distributed under this quality management system  
Compliant as per SVHC revision on [www.commscope.com/ProductCompliance](http://www.commscope.com/ProductCompliance)  
Compliant/Exempted  
Compliant/Exempted



## Included Products

BSAMNT-3                      –            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