

# RRV4-65A-R6



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

- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios

## 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>Radome Material</b>	Fiberglass, UV resistant
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	8
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	12

## Remote Electrical Tilt (RET) Information

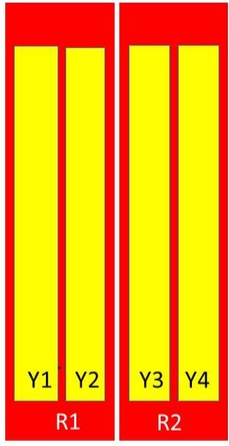
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions,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

## Dimensions

# RRV4-65A-R6

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	1499 mm   59.016 in
<b>Net Weight, without mounting kit</b>	33 kg   72.752 lb

## Array Layout



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
R2	694-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
Y1	1695-2690	5-6	3	CPxxxxxxxxxxxxxxxxY1
Y2	1695-2690	7-8	4	CPxxxxxxxxxxxxxxxxY2
Y3	1695-2690	9-10	5	CPxxxxxxxxxxxxxxxxY3
Y4	1695-2690	11-12	6	CPxxxxxxxxxxxxxxxxY4

Left Bottom Right

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

## Port Configuration

# RRV4-65A-R6



## 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>	1,200 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2500	2500–2690
<b>Gain, dBi</b>	13.3	13.7	13.8	16.5	17.7	18.2	18.2
<b>Beamwidth, Horizontal, degrees</b>	70	66	64	70	61	58	58
<b>Beamwidth, Vertical, degrees</b>	17	15.4	14.2	7.3	6.5	5.6	5.3
<b>Beam Tilt, degrees</b>	2–16	2–16	2–16	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	22	21	19	16	18	21	22
<b>Front-to-Back Ratio at 180°, dB</b>	34	31	28	33	33	31	30
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	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	1.5 14.0

# RRV4-65A-R6

<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	300	250	250	200	200

## Electrical Specifications, BASTA

<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>2300-2500</b>	<b>2500-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	13	13.3	13.6	16	17.1	17.8	17.8
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.5	±0.4	±0.8	±0.7	±0.4	±0.5
<b>Gain by Beam Tilt, average, dBi</b>	2°   13.1 9°   13.1 16°   12.8	2°   13.4 9°   13.4 16°   13.1	2°   13.7 9°   13.7 16°   13.2	2°   15.7 7°   16.0 12°   15.9	2°   16.9 7°   17.2 12°   17.0	2°   17.5 7°   17.9 12°   17.7	2°   17.3 7°   17.9 12°   17.7
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±6.9	±4.1	±4.0	±4.5	±5.8	±4.2	±5.6
<b>Beamwidth, Vertical Tolerance, degrees</b>	±1.2	±1.4	±1.3	±0.6	±0.5	±0.3	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>				14	16	16	16
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	21	21	21	26	26	26	24
<b>CPR at Boresight, dB</b>	22	21	19	19	21	17	19
<b>CPR at Sector, dB</b>	12	9	12	7	7	7	5

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	549.0 N @ 150 km/h (123.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	183.0 N @ 150 km/h (41.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	712.0 N @ 150 km/h (160.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	452.0 N @ 150 km/h (101.6 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
<b>Depth, packed</b>	309 mm   12.165 in
<b>Length, packed</b>	1686 mm   66.378 in
<b>Weight, gross</b>	45.7 kg   100.751 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
---------------	-----------------------

# RRV4-65A-R6

---

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-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

# 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.

## Product Classification

**Product Type** Downtilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 115 mm | 4.528 in

**Compatible Diameter, minimum** 60 mm | 2.362 in

**Weight, net** 6.2 kg | 13.669 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 6.4 kg | 14.11 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

# BSAMNT-3

---

