

# RRV4-65D-R6



12-port sector antenna, 4x 694–960 and 8x 1695–2690 MHz, 65° HPBW, 6x RET. Antenna rear wind loading 880N @ 150km/h

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Supports re-configurable antenna sharing capability enabling control of the internal RET system using up to two separate RET compatible OEM radios
- Wind Loading; Frontal / Lateral / Rear – 1070 / 375 / 880 N @ 150km/h

## 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>	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

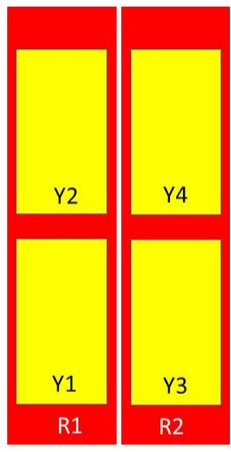
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	2 female   2 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions,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

# RRV4-65D-R6

## Dimensions

<b>Width</b>	498 mm   19.606 in
<b>Depth</b>	197 mm   7.756 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, without mounting kit</b>	44.5 kg   98.106 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

# RRV4-65D-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>	1,800 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1695–1880	1850–1990	1920–2180	2300–2500	2500–2690
<b>Gain, dBi</b>	15.8	16.4	16.8	17	17.6	17.8	18.3	17.7
<b>Beamwidth, Horizontal, degrees</b>	70	67	62	59	60	61	61	69
<b>Beamwidth, Vertical, degrees</b>	8.1	7.4	6.8	7.5	7	6.6	5.7	5.3
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	12	16	17	20	20	20	18	16
<b>Front-to-Back Ratio at 180°, dB</b>	32	32	33	37	38	36	34	33
<b>Isolation, Cross Polarization, dB</b>	28	28	28	28	28	28	28	28
<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30	30	30
<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	1.5 14.0

# RRV4-65D-R6

<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-153	-153	-153	-153	-153	-153
<b>Input Power per Port at 50°C, maximum, watts</b>	350	350	350	300	300	300	250	250

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694-790</b>	<b>790-890</b>	<b>880-960</b>	<b>1695-1880</b>	<b>1850-1990</b>	<b>1920-2180</b>	<b>2300-2500</b>	<b>2500-2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.5	16.2	16.6	16.5	17.2	17.4	17.8	17.2
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.4	±0.3	±0.9	±0.5	±0.6	±0.6	±0.7
<b>Gain by Beam Tilt, average, dBi</b>	2° 15.5 7° 15.6 12° 15.4	2° 16.1 7° 16.3 12° 16.0	2° 16.5 7° 16.7 12° 16.3	2° 16.3 7° 16.6 12° 16.4	2° 16.8 7° 17.3 12° 17.2	2° 16.9 7° 17.5 12° 17.5	2° 17.3 7° 17.9 12° 17.8	2° 16.8 7° 17.4 12° 17.1
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±4.4	±2.9	±4.6	±3.7	±1.6	±2.3	±6.4	±6.3
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.4	±0.6	±0.4	±0.5	±0.3	±0.5	±0.3	±0.2
<b>USLS, beampeak to 20° above beampeak, dB</b>	12	15	16	13	15	16	15	13
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	21	21	22	30	32	29	28	27
<b>CPR at Boresight, dB</b>	25	25	25	18	22	22	17	17
<b>CPR at Sector, dB</b>	8	5	7	8	10	9	8	5

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	1,070.0 N @ 150 km/h (240.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	375.0 N @ 150 km/h (84.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,385.0 N @ 150 km/h (311.4 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	880.0 N @ 150 km/h (197.8 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>	2935 mm   115.551 in
<b>Weight, gross</b>	65.4 kg   144.182 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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# RRV4-65D-R6

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CE	Compliant with the relevant CE product directives
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.
BSAMNT-M4	-	Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor bracket set.

## \* Footnotes

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

# 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.

## 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** 6.5 kg | 14.33 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

## Regulatory Compliance/Certifications

Agency	Classification
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-M4



Middle Downtilt Mounting Kit for Long Antennas for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor 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** 4.6 kg | 10.141 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

## Regulatory Compliance/Certifications

Agency	Classification
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

