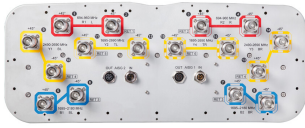


# RRVVHHTT-65D-R6



1. 16-port, sector antenna, RF port assignments are as follows: R1+R2 = 694–960, Y2+Y4 = 1695–2690MHz, B1+B2 = 1695–2180 and Y1+Y3 = 2490–2690 MHz, 65° horizontal beamwidth, 6x Internal RET. B1+B2 and Y1+Y3 share common RET, 2.7m

- 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
- A common electrical tilt setting is shared by RF Ports B1+B2 and Y1+Y3
- Electrical tilt settings applicable to RF Ports R1, R2, Y2, Y4 can be set independently (See Array Layout and RET Table below)

## OBSOLETE

This product was discontinued on: **March 31, 2023**

### Replaced By:

RRZZHHTT-65D-R6      16-port, sector antenna, RF port assignments are as follows: R1+R2 = 694–960, Y2+Y4 = 1427-2690MHz, B1+B2 = 1695–2180 and Y1+Y3 = 2490-2690 MHz, 65° horizontal beamwidth, 6x Internal RET. B1+B2 and Y1+Y3 share common RET, 2.7m

## 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>	12
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	16

# RRVVHHTT-65D-R6

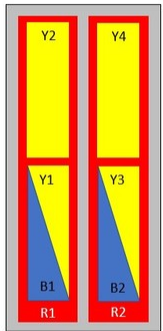
## Remote Electrical Tilt (RET) Information

<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

<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>	53.2 kg   117.286 lb

## Array Layout



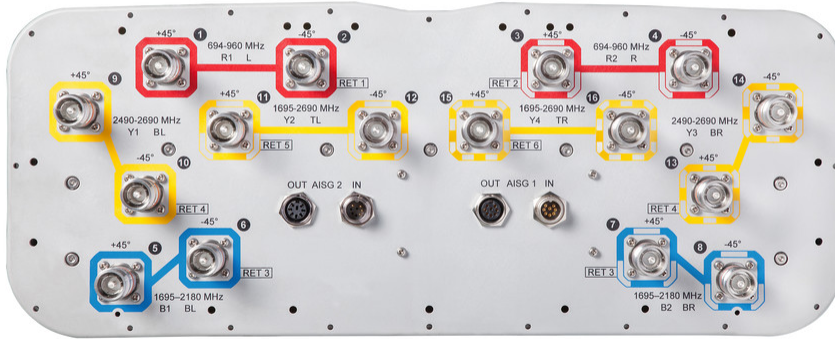
Left Right  
Bottom

Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
<b>R1</b>	694-960	1-2	1	CPxxxxxxxxxxxxxxxxR1
<b>R2</b>	694-960	3-4	2	CPxxxxxxxxxxxxxxxxR2
<b>B1</b>	1695-2180	5-6	3	CPxxxxxxxxxxxxxxxxB1
<b>B2</b>	1695-2180	7-8		
<b>Y1</b>	2490-2690	9-10	4	CPxxxxxxxxxxxxxxxxY1
<b>Y3</b>	2490-2690	13-14		
<b>Y2</b>	1695-2690	11-12	5	CPxxxxxxxxxxxxxxxxY2
<b>Y4</b>	1695-2690	15-16	6	CPxxxxxxxxxxxxxxxxY3

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

## Port Configuration

# RRVVHHTT-65D-R6



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2180 MHz   1695 – 2690 MHz   2490 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	900 W @ 50 °C

## Electrical Specifications

	R1-R2	R1-R2	B1-B2	B1-B2	Y1&Y3	Y2&Y4	Y2&Y4
<b>Frequency Band, MHz</b>	<b>694–862</b>	<b>880–960</b>	<b>1920–2180</b>	<b>1695–1880</b>	<b>2490–2690</b>	<b>1695–2180</b>	<b>2300–2690</b>
<b>Gain, dBi</b>	16.2	16.7	17.3	16.8	16.9	17	17.4
<b>Beamwidth, Horizontal, degrees</b>	68	61	60	58	68	59	62
<b>Beamwidth, Vertical, degrees</b>	8.1	7	6.8	7.6	5.7	7.4	5.6
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	18	20	20	18	17	15	17
<b>Front-to-Back Ratio at 180°, dB</b>	31	32	36	35	32	38	33
<b>Isolation, Cross Polarization, dB</b>	28	28	28	28	28	28	28

# RRVVHHTT-65D-R6

<b>Isolation, Inter-band, dB</b>	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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	300	300	250	250	150	250	200

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>694–862</b>	<b>880–960</b>	<b>1920–2180</b>	<b>1695–1880</b>	<b>2490–2690</b>	<b>1695–2180</b>	<b>2300–2690</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.8	16.4	17	16.4	16.4	16.3	16.9
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.5	±0.4	±0.6	±0.6	±0.8	±0.7
<b>Gain by Beam Tilt, average, dBi</b>	2° 15.8 7° 15.9 12° 15.5	2° 16.5 7° 16.6 12° 16.0	2° 16.6 7° 17.1 12° 17.0	2° 16.2 7° 16.5 12° 16.4	2° 16.1 7° 16.6 12° 16.2	2° 16.3 7° 16.5 12° 16.0	2° 16.8 7° 17.2 12° 16.4
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±3.5	±5.1	±2.9	±4.1	±5.4	±5	±7.8
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.9	±0.4	±0.6	±0.4	±0.3	±0.9	±0.6
<b>USLS, beampeak to 20° above beampeak, dB</b>	15	16	17	14	16	15	15
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	20	23	29	30	25	30	27
<b>CPR at Boresight, dB</b>	24	24	21	18	16	20	19
<b>CPR at Sector, dB</b>	7	9	8	10	6	7	6

## Mechanical Specifications

<b>Mechanical Tilt Range</b>	0°–12°
<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>	608 mm   23.937 in
<b>Depth, packed</b>	352 mm   13.858 in
<b>Length, packed</b>	2880 mm   113.386 in

# RRVVHHTT-65D-R6

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**Weight, gross**

75 kg | 165.346 lb

## Regulatory Compliance/Certifications

**Agency**

**Classification**

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

