

# RR2HH-6533D-R6



12-port sector/multibeam antenna, 4x 694–960 MHz 65° HPBW and 8x 1695–2400 MHz 4x 33°HPBW, 6x RET with tilt indicators

- All Internal RET actuators are connected in “Cascaded SRET” configuration
- Uses the 4.3-10 connector which is 40 percent smaller than the 7-16 DIN connector
- Enhances network capacity through six sectors on high band while maintaining low band coverage layer through three sectors with only three antenna faces

## OBSOLETE

This product was discontinued on: November 30, 2023

### Replaced By:

RR2VV-6533D-R6      12-port sector/multibeam antenna, 4x 698–960 MHz 65° HPBW and 8x 1710–2690 MHz 4x 33° HPBW, 6x RET

## General Specifications

<b>Antenna Type</b>	Multibeam
<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>	Copper   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

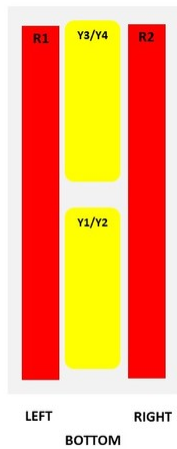
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<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (2)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions, maximum</b>	8 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## 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>	54 kg   119.049 lb

## Array Layout

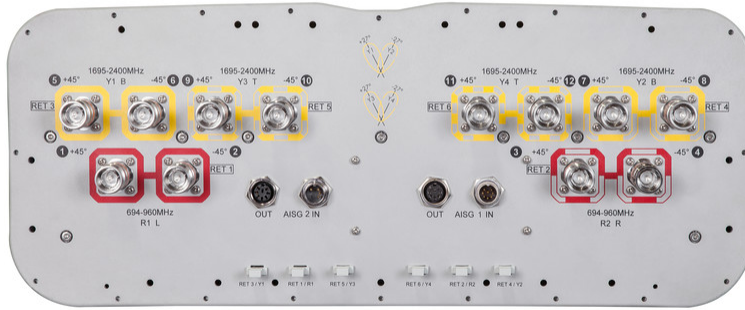


Array	Freq(MHz)	Conns	RET (SRET)	AISG RET UID
R1	694-960	1-2	1	CPXXXXXXXXXXXXXXXXR1
R2	694-960	3-4	2	CPXXXXXXXXXXXXXXXXR2
Y1	1695 – 2400	5-6	3	CPXXXXXXXXXXXXXXXXY1
Y2	1695 – 2400	7-8	4	CPXXXXXXXXXXXXXXXXY2
Y3	1695 – 2400	9-10	5	CPXXXXXXXXXXXXXXXXY3
Y4	1695 – 2400	11-12	6	CPXXXXXXXXXXXXXXXXY4

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

## Port Configuration

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## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2400 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	700 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	698–806	806–896	880–960	1695–1880	1850–1990	1920–2180	2300–2400
<b>Gain, dBi</b>	15.7	16	16.4	17.9	18.7	19.3	19.2
<b>Beam Centers, Horizontal, degrees</b>				±27	±27	±27	±27
<b>Beamwidth, Horizontal, degrees</b>	67	64	61	32	31	30	30
<b>Beamwidth, Vertical, degrees</b>	8.8	7.8	7.4	7.3	6.9	6.5	5.7
<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	19	19	17	17	18	22
<b>Front-to-Back Ratio at 180°, dB</b>	32	31	31	35	35	36	34
<b>Isolation, Cross Polarization, dB</b>	28	28	28	25	25	25	25

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<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30	30
<b>Isolation, Beam to Beam, dB</b>				17	17	17	17
<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	300	150	150	150	150

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698–806</b>	<b>806–896</b>	<b>880–960</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2180</b>	<b>2300–2400</b>
<b>Gain by all Beam Tilts, average, dBi</b>	15.4	15.8	16	17.2	18.2	18.7	18.5
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.4	±0.4	±1.3	±0.6	±0.8	±1.6
<b>Gain by Beam Tilt, average, dBi</b>	2° 15.3 7° 15.5 12° 15.3	2° 15.7 7° 15.9 12° 15.7	2° 15.8 7° 16.1 12° 15.9	2° 17.0 7° 17.3 12° 16.9	2° 18.0 7° 18.3 12° 17.9	2° 18.5 7° 18.9 12° 18.4	2° 18.5 7° 18.8 12° 18.1
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±6	±4.7	±3.4	±2.4	±1.2	±1.6	±1.4
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.4	±0.5	±0.4	±0.3	±0.5	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	17	16	17	15	16	16	13
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	21	22	22	29	30	30	29
<b>CPR at Boresight, dB</b>	19	18	18	16	16	18	13
<b>CPR at Sector, dB</b>	11	8	11				
<b>CPR at 10 dB Horizontal Beamwidth, dB</b>				4	7	8	9

## 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>	241.4 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	565 mm   22.244 in
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<b>Depth, packed</b>	309 mm   12.165 in
<b>Length, packed</b>	2935 mm   115.551 in
<b>Weight, gross</b>	75 kg   165.347 lb

## Regulatory Compliance/Certifications

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

