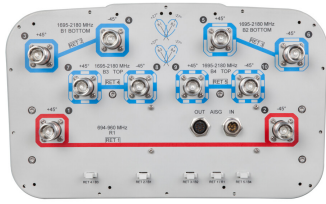


# R2HH-6533D-R5



10-port sector/multibeam antenna, 2x 694–960 MHz 65° HPBW and 8x 1695–2180 MHz 4x 33°HPBW, 5x 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

## 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>	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>	2
<b>RF Connector Quantity, total</b>	10

## Remote Electrical Tilt (RET) Information

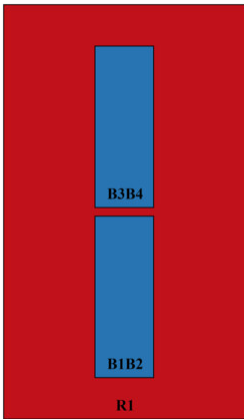
<b>RET Hardware</b>	CommRET v2
<b>RET Interface</b>	8-pin DIN Female   8-pin DIN Male
<b>RET Interface, quantity</b>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (4)   Low band (1)
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Power Consumption, normal conditions,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

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## Dimensions

<b>Width</b>	350 mm   13.78 in
<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2688 mm   105.827 in
<b>Net Weight, without mounting kit</b>	35 kg   77.162 lb

## Array Layout



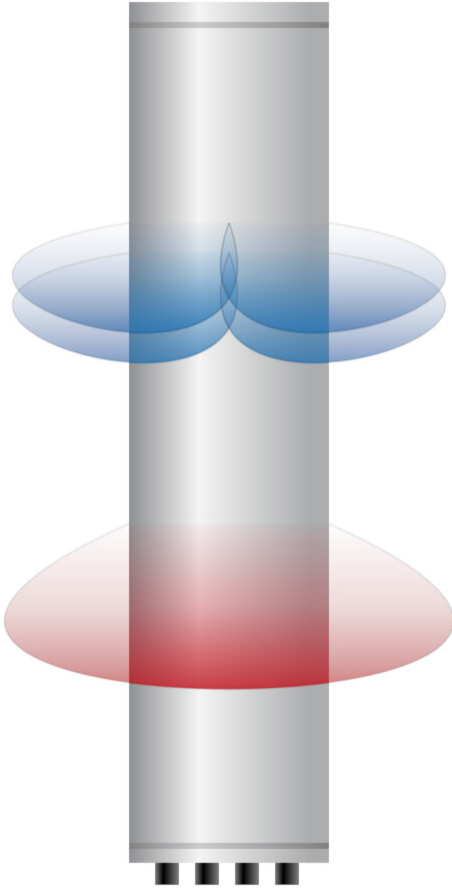
Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxxxxxR1
B1	1695-2180	3 - 4	2	AISG1	CPxxxxxxxxxxxxxxxxB1
B2	1695-2180	5 - 6	3	AISG1	CPxxxxxxxxxxxxxxxxB2
B3	1695-2180	7 - 8	4	AISG1	CPxxxxxxxxxxxxxxxxB3
B4	1695-2180	9 - 10	5	AISG1	CPxxxxxxxxxxxxxxxxB4

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

## Beams Configuration

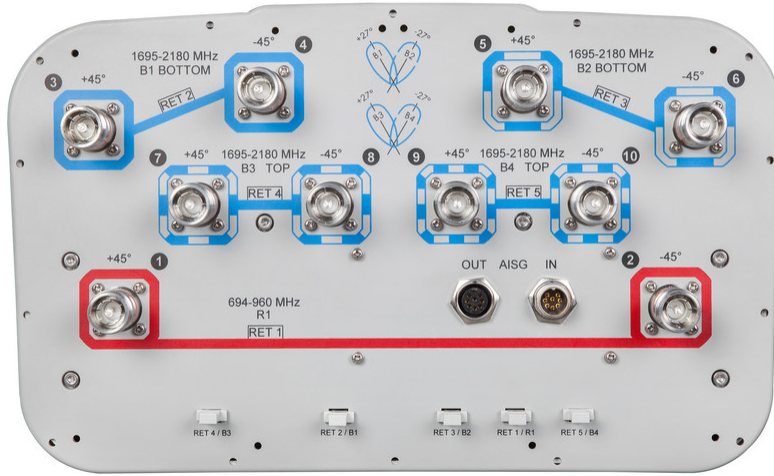
# R2HH-6533D-R5

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Port Configuration

# R2HH-6533D-R5



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2180 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,000 W @ 50 °C

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1695–1880	1850–1990	1920–2180
<b>Gain, dBi</b>	16.4	16.9	16.9	18.4	19.3	19.8
<b>Beam Centers, Horizontal, degrees</b>				±27	±27	±27
<b>Beamwidth, Horizontal, degrees</b>	68	65	65	33	31	31
<b>Beamwidth, Vertical, degrees</b>	8.9	8	7.4	7.2	6.8	6.4
<b>Beam Tilt, degrees</b>	2–12	2–12	2–12	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	17	20	19	16	16	17
<b>Front-to-Back Ratio at 180°, dB</b>	32	34	34	28	34	36
<b>Isolation, Cross Polarization, dB</b>	28	28	28	25	25	25

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<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30
<b>Isolation, Beam to Beam, dB</b>				17	17	17
<b>VSWR   Return loss, dB</b>	1.46   14.5	1.46   14.5	1.46   14.5	1.46   14.5	1.46   14.5	1.46   14.5
<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	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>Gain by all Beam Tilts, average, dBi</b>	16.3	16.7	16.8	17.7	18.8	19.3
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.2	±0.3	±0.3	±1.1	±0.6	±0.7
<b>Gain by Beam Tilt, average, dBi</b>	2°   16.1 7°   16.3 12°   16.3	2°   16.5 7°   16.8 12°   16.6	2°   16.6 7°   16.9 12°   16.7	2°   17.6 7°   17.8 12°   17.5	2°   18.6 7°   18.9 12°   18.6	2°   19.1 7°   19.5 12°   18.9
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±1.3	±1.4	±1.9	±1.8	±1.7	±1.7
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.4	±0.4	±0.3	±0.3	±0.4
<b>USLS, beampeak to 20° above beampeak, dB</b>	17	18	17	15	16	17
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	25	24	24	24	27	28
<b>CPR at Boresight, dB</b>	16	17	17	16	17	18
<b>CPR at Sector, dB</b>	10	10	9			
<b>CPR at 10 dB Horizontal Beamwidth, dB</b>				6	8	10

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	477.0 N @ 150 km/h (107.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	409.0 N @ 150 km/h (91.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,010.0 N @ 150 km/h (227.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	506.0 N @ 150 km/h (113.8 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	460 mm   18.11 in
<b>Depth, packed</b>	350 mm   13.78 in

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**Length, packed** 2830 mm | 111.417 in

**Weight, gross** 50 kg | 110.231 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.

## \* 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

