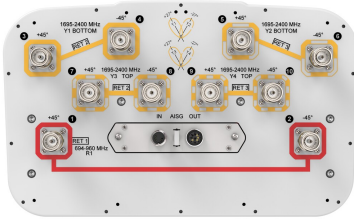


# R2HH-6533C-R3



10-port sector/multibeam antenna, 2x 694–960 sector and 8x 1695–2400 multibeam, 65° sector and 33° 4x multibeam, 3x RET

- 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

## 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
<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 (2)   Low band (1)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

<b>Width</b>	350 mm   13.78 in
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# R2HH-6533C-R3

<b>Depth</b>	208 mm   8.189 in
<b>Length</b>	2438 mm   95.984 in
<b>Net Weight, antenna only</b>	30.3 kg   66.8 lb

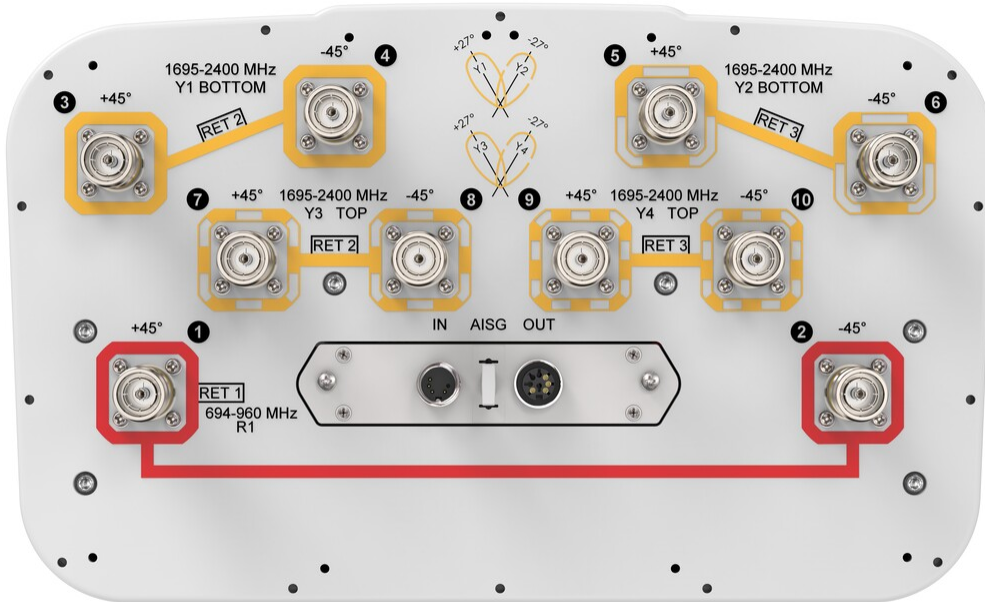
## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
R1	694-960	1 - 2	1	CPxxxxxxxxxxxxxxxxR1
Y1	1695-2400	3 - 4	2	CPxxxxxxxxxxxxxxxxY1
Y3	1695-2400	7 - 8		
Y2	1695-2400	5 - 6	3	CPxxxxxxxxxxxxxxxxY2
Y4	1695-2400	9 - 10		

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

## Port Configuration



## Electrical Specifications

# R2HH-6533C-R3

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1695 – 2400 MHz   694 – 960 MHz
<b>Polarization</b>	±45°

## Electrical Specifications

Frequency Band, MHz	694–790	790–890	880–960	1695–1880	1850–1990	1920–2180	2300–2400
<b>Gain, dBi</b>	16.1	16.6	16.8	17.5	18.5	19.2	19.4
<b>Beamwidth, Horizontal, degrees</b>	71	68	67	34	32	32	30
<b>Beamwidth, Vertical, degrees</b>	9.6	8.6	8	8.1	7.4	7	6.3
<b>Beam Tilt, degrees</b>	2–10	2–10	2–10	2–10	2–10	2–10	2–10
<b>USLS (First Lobe), dB</b>	17	20	19	16	16	18	19
<b>Front-to-Back Ratio at 180°, dB</b>	29	30	29	30	30	31	36
<b>Isolation, Cross Polarization, dB</b>	27	27	27	25	25	25	25
<b>Isolation, Inter-band, dB</b>	30	30	30	30	30	30	30
<b>Isolation, Beam to Beam, dB</b>				16	16	16	16
<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	200	200	200	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	880–960	1695–1880	1850–1990	1920–2180	2300–2400
<b>Gain by all Beam Tilts, average, dBi</b>	15.8	16.4	16.6	16.8	18	18.6	18.9
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.4	±0.3	±0.2	±1	±0.6	±0.6	±0.8
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±1.9	±1.7	±1.3	±1.7	±1	±0.9	±1.2
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.6	±0.4	±0.4	±0.4	±0.3	±0.4	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	17	18	17	15	16	16	13
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	24	23	22	22	25	26	29
<b>CPR at Boresight, dB</b>	14	16	15	15	18	18	15

# R2HH-6533C-R3

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## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	425.0 N @ 150 km/h (95.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	361.0 N @ 150 km/h (81.2 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	899.0 N @ 150 km/h (202.1 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	451.0 N @ 150 km/h (101.4 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	456 mm   17.953 in
<b>Depth, packed</b>	357 mm   14.055 in
<b>Length, packed</b>	2585 mm   101.772 in
<b>Weight, gross</b>	44 kg   97.003 lb

## Regulatory Compliance/Certifications

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



## 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.
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## \* Footnotes

<b>Performance Note</b>	Severe environmental conditions may degrade optimum performance
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