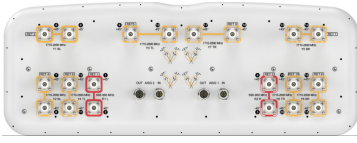


# RR2V4-6533D-R10



20-port Sector/Multi beam antenna, 4x 698–960 MHz 65° HPBW and 16x 1710–2690MHz 8x33° HPBW, 10x 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
- New aerodynamic endcaps for wind load optimization

## 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
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	16
<b>RF Connector Quantity, low band</b>	4
<b>RF Connector Quantity, total</b>	20

## 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 (8)   Low band (2)
<b>Power Consumption, active state, maximum</b>	8 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0

## Dimensions

<b>Width</b>	640 mm   25.197 in
<b>Depth</b>	235 mm   9.252 in
<b>Length</b>	2688 mm   105.827 in

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Net Weight, antenna only

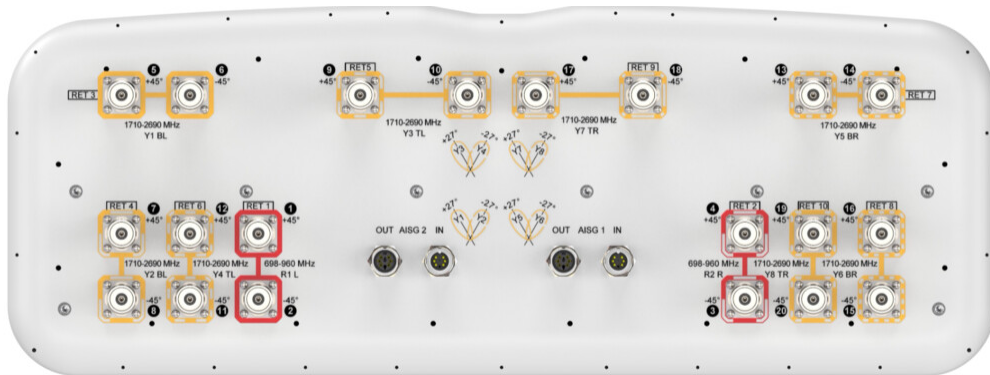
78 kg | 171.96 lb

## Array Layout



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	698-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxR1
R2	698-960	3 - 4	2	AISG1	CPxxxxxxxxxxxxR2
Y1	1710-2690	5 - 6	3	AISG1	CPxxxxxxxxxxxxY1
Y2	1710-2690	7 - 8	4	AISG1	CPxxxxxxxxxxxxY2
Y3	1710-2690	9 - 10	5	AISG1	CPxxxxxxxxxxxxY3
Y4	1710-2690	11 - 12	6	AISG1	CPxxxxxxxxxxxxY4
Y5	1710-2690	13 - 14	7	AISG1	CPxxxxxxxxxxxxY5
Y6	1710-2690	15 - 16	8	AISG1	CPxxxxxxxxxxxxY6
Y7	1710-2690	17 - 18	9	AISG1	CPxxxxxxxxxxxxY7
Y8	1710-2690	19 - 20	10	AISG1	CPxxxxxxxxxxxxY8

## Port Configuration



## Electrical Specifications

<b>Impedance</b>	50 ohm
<b>Operating Frequency Band</b>	1710 – 2690 MHz   698 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	2,250 W @ 50 °C

## Electrical Specifications

	R1,R2	R1,R2	R1,R2	Y1-Y8	Y1-Y8	Y1-Y8	Y1-Y8	Y1-Y8
<b>Frequency Band, MHz</b>	698-790	790-890	890-960	1710-1880	1850-1990	1920-2180	2300-2500	2500-2690

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<b>RF Port</b>	1-4	1-4	1-4	5-20	5-20	5-20	5-20	5-20
<b>Gain at Mid Tilt, dBi</b>	16.2	16.4	16.4	17.4	18.3	19	20	20.1
<b>Beam Centers, Horizontal, degrees</b>				±27	±27	±27	±27	±27
<b>Beamwidth, Horizontal, degrees</b>	63	62	69	36	34	33	26	25
<b>Beamwidth, Vertical, degrees</b>	9	8.2	7.5	7.2	6.8	6.4	5.6	5.2
<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>	19	21	19	17	18	17	18	19
<b>Front-to-Back Ratio at 180°, dB</b>	34	33	29	34	35	35	34	32
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	25	25	25	25	25	25	25	25
<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
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-150	-150	-150	-150	-150	-150	-150	-150
<b>Input Power per Port at 50°C, maximum, watts</b>	250	250	250	200	200	200	150	150

## Electrical Specifications, BASTA

<b>Frequency Band, MHz</b>	<b>698-790</b>	<b>790-890</b>	<b>890-960</b>	<b>1710-1880</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>	16.1	16.3	16.3	17.2	18	18.8	19.7	19.7
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.3	±0.3	±0.5	±1.4	±0.6	±0.9	±0.6	±0.6
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±5	±5	±6	±2	±2	±2	±2	±2
<b>Beamwidth, Vertical Tolerance, degrees</b>	±0.5	±0.6	±0.4	±0.4	±0.3	±0.4	±0.3	±0.3
<b>USLS, beampeak to 20° above beampeak, dB</b>	17	17	17	14	16	16	15	16
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	25	25	24	28	29	29	28	27
<b>CPR at Boresight, dB</b>	14	15	15	19	20	21	20	16
<b>CPR at Sector, dB</b>	10	10	13					
<b>CPR at 10 dB Horizontal Beamwidth, dB</b>				10	12	13	12	10

## Mechanical Specifications

**Wind Loading @ Velocity, frontal**

1,103.0 N @ 150 km/h (248.0 lbf @ 150 km/h)

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<b>Wind Loading @ Velocity, lateral</b>	329.0 N @ 150 km/h (74.0 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	1,405.0 N @ 150 km/h (315.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	689.0 N @ 150 km/h (154.9 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	760 mm   29.921 in
<b>Depth, packed</b>	390 mm   15.354 in
<b>Length, packed</b>	2910 mm   114.567 in
<b>Weight, gross</b>	103 kg   227.076 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

## 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

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