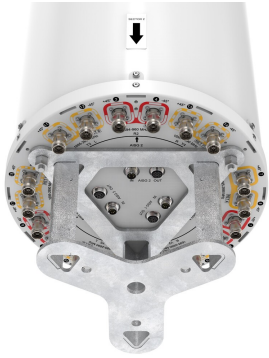


# 3X-RVV-65A-R9



18-port sector antenna, 6x694-960 and 12x1695-2690 MHz, 65° HPBW, 9xRET.

- Features a multiband tri-sectors antenna built under one radome
- Each sector offers one low band DualPol® array and two mid band DualPol® arrays with independent Electrical Tilt
- Fully integrated flange mounting system for ease of installation
- Aesthetically pleasing concealment solution for tough zoning areas
- Pole mounting kit not included. Separate pole mounting kit TS-MNT-TOP-370 available for pole diameter from 150mm (5.9 inch) to 273 mm (10.7 inch). Please check Optional Mounting Kits section for more details

## General Specifications

<b>Antenna Type</b>	DualPol® tri-sector
<b>Band</b>	Multiband
<b>Color</b>	Light Gray (RAL 7035)
<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>	ASA, UV stabilized
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, mid band</b>	12
<b>RF Connector Quantity, low band</b>	6
<b>RF Connector Quantity, total</b>	18

## 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>	3 female   3 male
<b>Input Voltage</b>	10-30 Vdc
<b>Internal RET</b>	Low band (3)   Mid band (6)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	2 W

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**Protocol** 3GPP/AISG 2.0

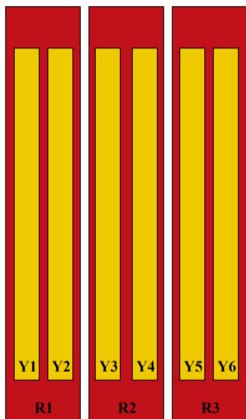
## Dimensions

**Length** 1446 mm | 56.929 in

**Net Weight, antenna only** 35.2 kg | 77.603 lb

**Outer Diameter** 370 mm | 14.567 in

## Array Layout

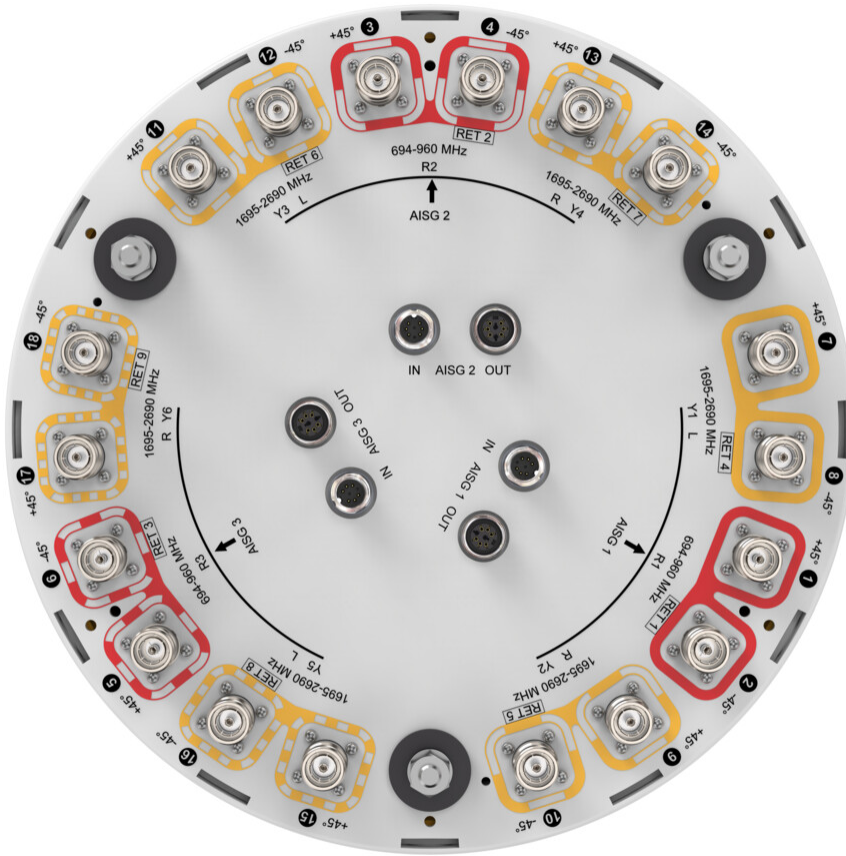


Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
R1	694-960	1 - 2	1	AISG1	CPXXXXXXXXXXXXR1
R2	694-960	3 - 4	2	AISG2	CPXXXXXXXXXXXXR2
R3	694-960	5 - 6	3	AISG3	CPXXXXXXXXXXXXR3
Y1	1695-2690	7 - 8	4	AISG1	CPXXXXXXXXXXXXY1
Y2	1695-2690	9 - 10	5	AISG1	CPXXXXXXXXXXXXY2
Y3	1695-2690	11 - 12	6	AISG2	CPXXXXXXXXXXXXY3
Y4	1695-2690	13 - 14	7	AISG2	CPXXXXXXXXXXXXY4
Y5	1695-2690	15 - 16	8	AISG3	CPXXXXXXXXXXXXY5
Y6	1695-2690	17 - 18	9	AISG3	CPXXXXXXXXXXXXY6

(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 – 2690 MHz   694 – 960 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	1,200 W @ 50 °C

## Electrical Specifications

	R1,R2,R3	R1,R2,R3	R1,R2,R3	Y1-Y6	Y1-Y6	Y1-Y6
<b>Frequency Band, MHz</b>	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690
<b>RF Port</b>	1-6	1-6	1-6	7-18	7-18	7-18
<b>Gain, dBi</b>	14	14.4	14.7	17.2	18	18.1
<b>Beamwidth, Horizontal,</b>	75	75	74	62	59	59

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degrees

<b>Beamwidth, Vertical, degrees</b>	15.3	13.7	12.6	7	6.2	5.2
<b>Beam Tilt, degrees</b>	3–18	3–18	3–18	2–12	2–12	2–12
<b>USLS (First Lobe), dB</b>	14	17	20	19	18	18
<b>Front-to-Back Ratio at 180°, dB</b>	33	32	29	31	35	32
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	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
<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	200

## Electrical Specifications, BASTA

Frequency Band, MHz	694–790	790–890	890–960	1695–1920	1920–2180	2300–2690
<b>Gain by all Beam Tilts, average, dBi</b>	13.7	14.1	14.4	16.8	17.5	17.7
<b>Gain by all Beam Tilts Tolerance, dB</b>	±0.5	±0.4	±0.4	±0.5	±0.6	±0.5
<b>Beamwidth, Horizontal Tolerance, degrees</b>	±2	±2	±2	±4	±3	±5
<b>Beamwidth, Vertical Tolerance, degrees</b>	±1.2	±0.9	±0.9	±0.4	±0.5	±0.4
<b>USLS, beampeak to 20° above beampeak, dB</b>			20	17	16	14
<b>Front-to-Back Total Power at 180° ± 30°, dB</b>	19	21	23	26	27	24
<b>CPR at Boresight, dB</b>	21	22	24	21	21	22
<b>CPR at Sector, dB</b>	13	11	17	7	7	9

## Mechanical Specifications

<b>Effective Projective Area (EPA), frontal</b>	0.3 m <sup>2</sup>   3.229 ft <sup>2</sup>
<b>Effective Projective Area (EPA), lateral</b>	0.3 m <sup>2</sup>   3.229 ft <sup>2</sup>
<b>Wind Loading @ Velocity, frontal</b>	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, maximum</b>	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)

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**Wind Speed, maximum** 241 km/h (150 mph)

## Packaging and Weights

**Width, packed** 478 mm | 18.819 in  
**Depth, packed** 464 mm | 18.268 in  
**Length, packed** 1784 mm | 70.236 in  
**Weight, gross** 41.8 kg | 92.153 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Above maximum concentration value
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



## \* Footnotes

**Performance Note** Severe environmental conditions may degrade optimum performance