

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

Antenna Type	DualPol® tri-sector
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	ASA, UV stabilized
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	0
RF Connector Quantity, mid band	12
RF Connector Quantity, low band	6
RF Connector Quantity, total	18

Remote Electrical Tilt (RET) Information

RET Hardware	CommRET v2
RET Interface	8-pin DIN Female 8-pin DIN Male
RET Interface, quantity	3 female 3 male
Input Voltage	10-30 Vdc
Internal RET	Low band (3) Mid band (6)
Power Consumption, active state, maximum	10 W

3X-RVV-65A-R9

Power Consumption, idle state, maximum	2 W
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

Y1

Y2

R1

Y3

Y4

R2

Y5

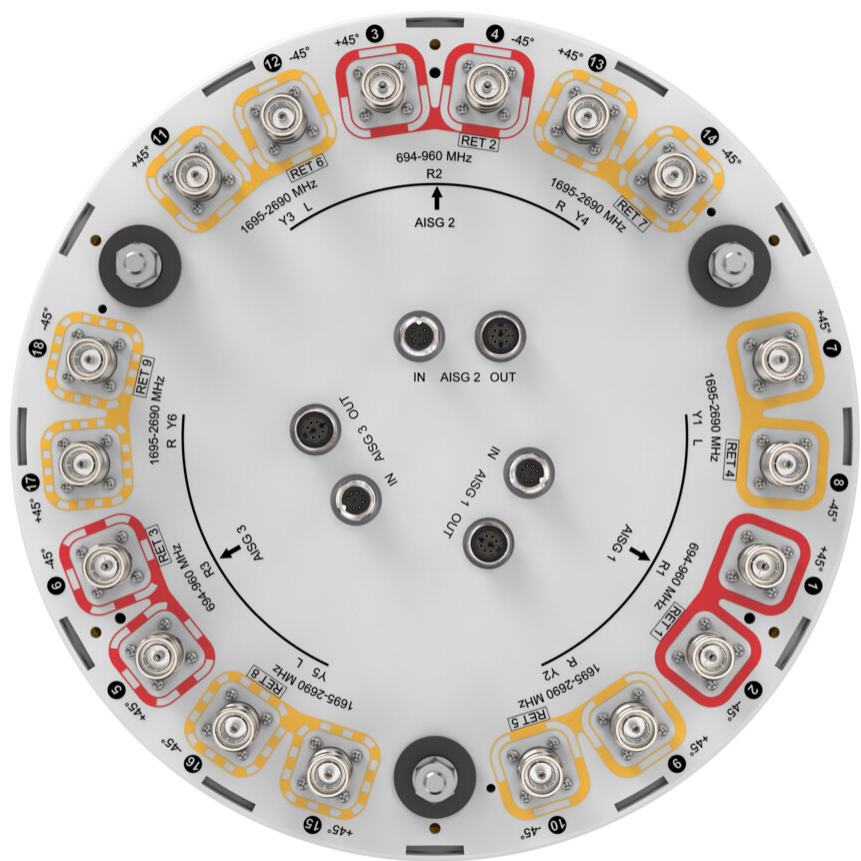
Y6

R3

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

Port Configuration

3X-RVV-65A-R9



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 694 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,200 W @ 50 °C

Electrical Specifications

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

3X-RVV-65A-R9

degrees						
Beamwidth, Vertical, degrees	15.3	13.7	12.6	7	6.2	5.2
Beam Tilt, degrees	3–18	3–18	3–18	2–12	2–12	2–12
USLS (First Lobe), dB	14	17	20	19	18	18
Front-to-Back Ratio at 180°, dB	33	32	29	31	35	32
CPR at Boresight, dB	21	22	24	21	21	22
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25	25
VSWR Return loss, dB	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-150	-150	-150	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	300	300	300	250	250	200

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.3 m² 3.229 ft²
Effective Projective Area (EPA), lateral	0.3 m² 3.229 ft²
Wind Loading @ Velocity, frontal	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	319.0 N @ 150 km/h (71.7 lbf @ 150 km/h)
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

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

3X-RVV-65A-R9



* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance