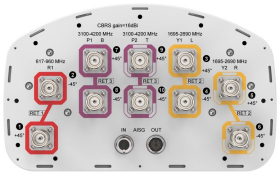
KVVSS-65A-R3-V1



10-port sector antenna, 2x 617-960, 4x 1695-2690 and 4x 3100-4200 MHz, 65° HPBW, 3x RETs. Both high bands share the same electrical tilt.

- Small size ideal for deploying low band, mid band and 3.5 GHz in concealments and flagpoles

General Specifications

Antenna Type	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	Fiberglass, UV resistant
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, mid band	4
RF Connector Quantity, low band	2
RF Connector Quantity, total	10

Remote Electrical Tilt (RET) Information

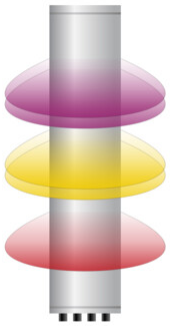
RET Hardware	CommRET v2
RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	1 female | 1 male
Input Voltage	10–30 Vdc
Internal RET	High band (1) | Low band (1) | Mid band (1)
Power Consumption, active state, maximum	10 W
Power Consumption, idle state, maximum	2 W
Protocol	3GPP/AISG 2.0 (Multi-RET)

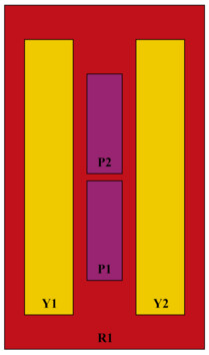
Dimensions

KVVSS-65A-R3-V1

Width	301 mm | 11.85 in
Depth	181 mm | 7.126 in
Length	1219 mm | 47.992 in
Net Weight, antenna only	17.5 kg | 38.581 lb

Array Layout

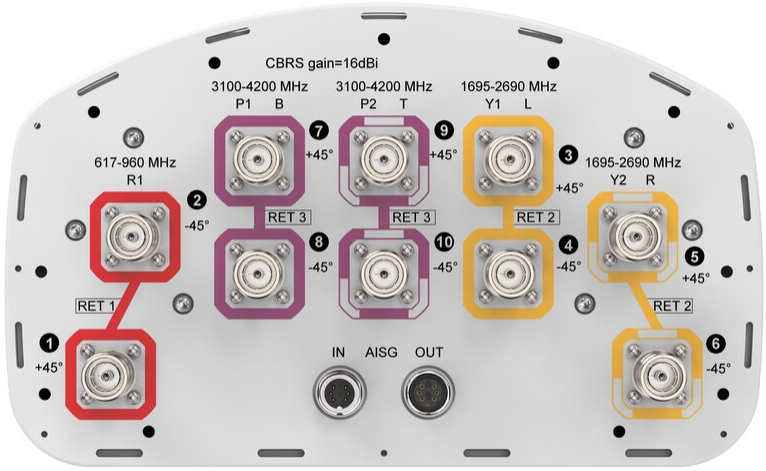




Array ID	Frequency (MHz)	RF Connector	RET (MRET)	AISG No.	AISG RET UID
R1	617-960	1 - 2	1	AISG1	CPxxxxxxxxxxxxMM.1
Y1	1695-2690	3 - 4	2	AISG1	CPxxxxxxxxxxxxMM.2
Y2	1695-2690	5 - 6			
P1	3100-4200	7 - 8	3	AISG1	CPxxxxxxxxxxxxMM.3
P2	3100-4200	9 - 10			

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

Port Configuration



Electrical Specifications

Impedance	50 ohm

KVVSS-65A-R3-V1

Operating Frequency Band	1695 – 2690 MHz | 3100 – 4200 MHz | 617 – 960 MHz
Polarization	±45°
Total Input Power, maximum	1,000 W @ 50 °C

Electrical Specifications

	R1	R1	R1	R1	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2	Y1,Y2
Frequency Band, MHz	**617–698**	**698–806**	**806–894**	**894–960**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2500**	**2500–2690**
RF Port	1,2	1,2	1,2	1,2	3,4,5,6	3,4,5,6	3,4,5,6	3,4,5,6	3,4,5,6
Gain at Mid Tilt, dBi	12.7	13.2	13.3	13.2	16.3	16.6	16.9	16.8	17.1
Beamwidth, Horizontal, degrees	77	74	73	71	67	62	62	72	63
Beamwidth, Vertical, degrees	21	18.5	16.4	15.2	7.6	7	6.6	6	5.7
Beam Tilt, degrees	4–18	4–18	4–18	4–18	2–12	2–12	2–12	2–12	2–12
USLS (First Lobe), dB	18	19	19	18	17	17	18	17	17
Front-to-Back Ratio at 180°, dB	27	34	34	34	33	35	33	30	32
Isolation, Cross Polarization, dB	25	25	25	25	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	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	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	-150	-150	-150
Input Power per Port at 50°C, maximum, watts	250	250	250	250	200	200	200	200	200

Electrical Specifications

	P1,P2	P1,P2	P1,P2
Frequency Band, MHz	**3100–3400**	**3400–3800**	**3700–4200**
RF Port	7,8,9,10	7,8,9,10	7,8,9,10
Gain at Mid Tilt, dBi	15.5	15.5	15.6
Beamwidth, Horizontal, degrees	50	59	59
Beamwidth, Vertical, degrees	8.5	7.9	7.3
Beam Tilt, degrees	2–12	2–12	2–12
USLS (First Lobe), dB	18	16	15
Front-to-Back Ratio at	31	30	29

180°, dB			
Isolation, Cross Polarization, dB	25	25	25
Isolation, Inter-band, dB	25	25	25
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-145	-145	-145
Input Power per Port at 50°C, maximum, watts	100	100	100

Mechanical Specifications

Effective Projective Area (EPA), frontal	0.16 m² | 1.722 ft²
Effective Projective Area (EPA), lateral	0.13 m² | 1.399 ft²
Wind Loading @ Velocity, frontal	173.0 N @ 150 km/h (38.9 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	142.0 N @ 150 km/h (31.9 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	334.0 N @ 150 km/h (75.1 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	176.0 N @ 150 km/h (39.6 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	565 mm | 22.244 in
Depth, packed	342 mm | 13.465 in
Length, packed	1362 mm | 53.622 in
Weight, gross	23 kg | 50.706 lb

Regulatory Compliance/Certifications

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

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance