VV-65A-R1

4-port sector antenna, 4x 1695–2690 MHz, 65° HPBW, 1x RET#The two high band arrays utilize a common tilt.

- The RET interface comprises one pair of AISG input/output ports
- Meets -153dBc 3rd order PIM, using 2x40W carriers

General Specifications

Antenna Type	Sector
Band	Single band
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	PVC, 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, total	4

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)
Power Consumption, idle state, maximum	2 W
Power Consumption, normal conditions, maximum	10 W
Protocol	3GPP/AISG 2.0

Dimensions

Width	307 mm | 12.087 in
Depth	118 mm | 4.646 in

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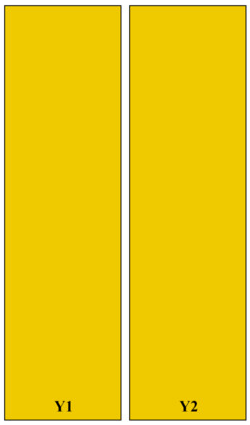
Length	1390 mm | 54.724 in
Net Weight, antenna only	10.8 kg | 23.81 lb

Array Layout



Array ID	Frequency (MHz)	RF Connector	HPBW	RET (SRET)	AISG No.	AISG RET UID
Y1	1695-2690	1 - 2	65°	1	AISG1	CPxxxxxxxxxxxxxxY1
Y2	1695-2690	3 - 4	65°			

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

Port Configuration

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz
Polarization	±45°
Total Input Power, maximum	400 W @ 50 °C

Electrical Specifications

Frequency Band, MHz	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2500**	**2490–2690**

Gain, dBi	17.5	17.7	18.2	18.5	18.6
Beamwidth, Horizontal, degrees	66	65	66	63	62
Beamwidth, Vertical, degrees	6.9	6.5	6.1	5.4	5.2
Beam Tilt, degrees	0–12	0–12	0–12	0–12	0–12
USLS (First Lobe), dB	17	18	18	21	21
Front-to-Back Ratio at 180°, dB	30	31	32	29	30
Isolation, Cross Polarization, dB	30	30	30	30	30
Isolation, Inter-band, dB	28	28	28	28	28
VSWR | Return loss, dB	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 40 W, dBc	-153	-153	-153	-153	-153
Input Power per Port at 50°C, maximum, watts	300	300	300	300	250

Electrical Specifications, BASTA

Frequency Band, MHz	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2500**	**2490–2690**
Gain by all Beam Tilts, average, dBi	17.1	17.5	17.9	18.3	18.2
Gain by all Beam Tilts Tolerance, dB	±0.5	±0.4	±0.4	±0.4	±0.5
Beamwidth, Horizontal Tolerance, degrees	±4.5	±3.5	±2.7	±2.5	±3.2
Beamwidth, Vertical Tolerance, degrees	±0.4	±0.3	±0.5	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	16	17	17	18	16
Front-to-Back Total Power at 180° ± 30°, dB	24	26	27	26	26
CPR at Boresight, dB	16	17	17	20	19
CPR at Sector, dB	15	14	13	7	9

Mechanical Specifications

Wind Loading @ Velocity, frontal	494.0 N @ 150 km/h (111.1 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	102.0 N @ 150 km/h (22.9 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	598.0 N @ 150 km/h (134.4 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

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Packaging and Weights

Width, packed	404 mm | 15.906 in
Depth, packed	278 mm | 10.945 in
Length, packed	1527 mm | 60.118 in
Weight, gross	19 kg | 41.888 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted

Included Products

600899A-2	–	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.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance