

# 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

<b>Antenna Type</b>	Sector
<b>Band</b>	Single band
<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>	PVC, UV resistant
<b>Reflector Material</b>	Aluminum
<b>RF Connector Interface</b>	4.3-10 Female
<b>RF Connector Location</b>	Bottom
<b>RF Connector Quantity, high band</b>	4
<b>RF Connector Quantity, total</b>	4

## 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>	1 female   1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal RET</b>	High band (1)
<b>Power Consumption, idle state, maximum</b>	2 W
<b>Power Consumption, normal conditions, maximum</b>	10 W
<b>Protocol</b>	3GPP/AISG 2.0

## Dimensions

<b>Width</b>	307 mm   12.087 in
<b>Depth</b>	118 mm   4.646 in

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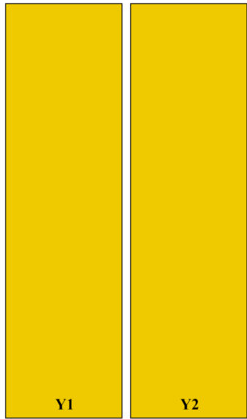
**Length** 1390 mm | 54.724 in

**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	CPxxxxxxxxxxxxxxxxxY1
Y2	1695-2690	3 - 4	65°			

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



## Port Configuration



## Electrical Specifications

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

## Electrical Specifications

<b>Frequency Band, MHz</b>	<b>1695–1880</b>	<b>1850–1990</b>	<b>1920–2200</b>	<b>2300–2500</b>	<b>2490–2690</b>
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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

<b>Width, packed</b>	404 mm   15.906 in
<b>Depth, packed</b>	278 mm   10.945 in
<b>Length, packed</b>	1527 mm   60.118 in
<b>Weight, gross</b>	19 kg   41.888 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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.
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## \* Footnotes

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

## Product Classification

**Product Type** Downtilt mounting kit

## General Specifications

**Application** Outdoor

**Color** Silver

## Dimensions

**Compatible Diameter, maximum** 114.3 mm | 4.5 in

**Compatible Diameter, minimum** 61 mm | 2.402 in

**Weight, net** 3.9 kg | 8.598 lb

## Material Specifications

**Material Type** Galvanized steel

## Packaging and Weights

**Included** Brackets | Hardware

**Packaging quantity** 1

**Weight, gross** 4.2 kg | 9.259 lb

## Regulatory Compliance/Certifications

Agency	Classification
CE	Compliant with the relevant CE product directives
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

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