

# VVSSP-65S-R1BV2-V4



10-port small cell antenna, 4x 1695–2690, 4x 3300–4200 and 2x 5150–5925 MHz. 65° HPBW, Internal RET and SBT

## General Specifications

<b>Antenna Type</b>	Small Cell
<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>	PVC, UV resistant
<b>Radiator Material</b>	Aluminum   Low loss circuit board
<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>	10
<b>RF Connector Quantity, mid band</b>	0
<b>RF Connector Quantity, low band</b>	0
<b>RF Connector Quantity, total</b>	10

## Remote Electrical Tilt (RET) Information

<b>RET Interface</b>	8-pin DIN Male
<b>RET Interface, quantity</b>	1 male
<b>Input Voltage</b>	10–30 Vdc
<b>Internal Bias Tee</b>	Port 1
<b>Internal RET</b>	High band (1)
<b>Power Consumption, active state, maximum</b>	10 W
<b>Power Consumption, idle state, maximum</b>	1 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

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## Dimensions

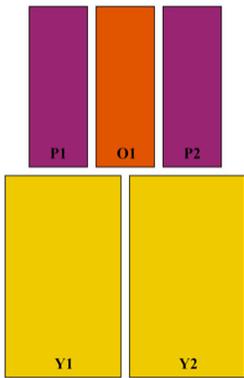
<b>Width</b>	307 mm   12.087 in
<b>Depth</b>	118 mm   4.646 in
<b>Length</b>	600 mm   23.622 in
<b>Net Weight, antenna only</b>	6.9 kg   15.212 lb

## 5 GHz Port Power Table

5 GHz FCC Power Requirements				
U-NII Band	U-NII 1	U-NII 2A	U-NII 2C	U-NII 3
Frequency (MHz)	5150 - 5250	5250 - 5350	5470 - 5725	5725 - 5850
Max Input power per port to align with FCC Title 47 Part 15 (Watts)	0.5	0.125	0.125	0.5

## Array Layout

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Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	RET UID
Y1	1695-2690	1 - 2	1	AISG1	ARxxxxxxxxxxxxx1
Y2	1695-2690	3 - 4			
P1	3300-4200	5 - 6	N/A	NA	N/A
P2	3300-4200	7 - 8			
O1	5150-5925	9 - 10			

(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   3300 – 4200 MHz   5150 – 5925 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	440 W @ 50 °C

## Electrical Specifications

	Y1,Y2	Y1,Y2	Y1,Y2	P1,P2	P1,P2	P1,P2	O1
<b>Frequency Band, MHz</b>	<b>1695–1920</b>	<b>1920–2180</b>	<b>2300–2690</b>	<b>3300–3550</b>	<b>3550–3700</b>	<b>3700–4200</b>	<b>5150–5925</b>
<b>RF Port</b>	1,2,3,4	1,2,3,4	1,2,3,4	5,6,7,8	5,6,7,8	5,6,7,8	9,10
<b>Gain, dBi</b>	12.5	12.9	13.5	10.4	10.1	10.3	4.1

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<b>Gain at Mid Tilt, dBi</b>	12.3	12.4	13.1				
<b>Beamwidth, Horizontal, degrees</b>	74	75	68	67	75	69	61
<b>Beamwidth, Vertical, degrees</b>	20.5	18.3	15.9	35.8	32.8	33.1	25.4
<b>Beam Tilt, degrees</b>	2-10	2-10	2-10	7	7	7	4
<b>USLS (First Lobe), dB</b>	14	16	15	15	14	14	
<b>Front-to-Back Ratio at 180°, dB</b>	26	24	29	28	28	25	29
<b>Isolation, Cross Polarization, dB</b>	25	25	25	25	25	25	25
<b>Isolation, Inter-band, dB</b>	28	28	28	28	28	28	28
<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	1.5 14.0
<b>PIM, 3rd Order, 2 x 20 W, dBc</b>	-153	-153	-150	-140	-140	-140	
<b>Input Power per Port at 50°C, maximum, watts</b>	75	75	75	35	35	35	5

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	198.0 N @ 150 km/h (44.5 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, lateral</b>	37.0 N @ 150 km/h (8.3 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	240.0 N @ 150 km/h (54.0 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	404 mm   15.906 in
<b>Depth, packed</b>	276 mm   10.866 in
<b>Length, packed</b>	772 mm   30.394 in
<b>Weight, gross</b>	9.4 kg   20.723 lb

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

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## Included Products

- BSAMNT-3 – Wide Profile Antenna 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