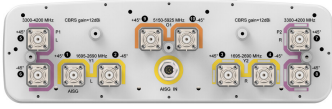


# VVSSP-45S-R1BV2



10-port small cell antenna, 4x 1695–2690, 4x 3300–4200 and 2x 5150–5925 MHz. 45° HPBW, Internal RET and SBT

- Includes everything needed for a low to mid power 4G/5G outdoor small cell site

## 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>	Fiberglass, UV resistant
<b>Radiator Material</b>	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>	6
<b>RF Connector Quantity, mid band</b>	4
<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>	Mid 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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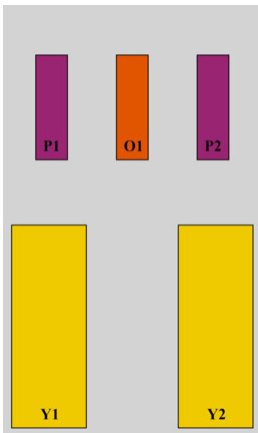
## Dimensions

<b>Width</b>	407 mm   16.024 in
<b>Depth</b>	120 mm   4.724 in
<b>Length</b>	610 mm   24.016 in
<b>Net Weight, without mounting kit</b>	8.7 kg   19.18 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



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG RET UID
Y1	1695-2690	1 - 2	1	ARxxxxxxxxxxxxx1
Y2	1695-2690	3 - 4		
P1	3300-4200	5 - 6	N/A	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

# VVSSP-45S-R1BV2



## 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>	300 W @ 50 °C   500 W

## Electrical Specifications

Frequency Band, MHz	1695–1920	1920–2180	2300–2690	3300–3550	3550–3700	3700–4200	5150–5925
<b>Gain, dBi</b>	14.3	15.1	15.3	10.3	10.3	10.9	3.9
<b>Beamwidth, Horizontal, degrees</b>	46	41	32	49	48	41	58
<b>Beamwidth, Vertical, degrees</b>	21	19	15.8	35.9	31.9	29.2	26.8
<b>Beam Tilt, degrees</b>	2–10	2–10	2–10	7	7	7	4
<b>USLS (First Lobe), dB</b>	24	26	24	13	12	19	21
<b>Front-to-Back Ratio at 180°, dB</b>	32	32	25	26	22	24	27
<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	-145	-145	-145	
<b>Input Power per Port, maximum, watts</b>	125	125	125	50	50	50	5

## Mechanical Specifications

<b>Wind Loading @ Velocity, frontal</b>	317.0 N @ 150 km/h (71.3 lbf @ 150 km/h)
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# VVSSP-45S-R1BV2

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<b>Wind Loading @ Velocity, lateral</b>	102.0 N @ 150 km/h (22.9 lbf @ 150 km/h)
<b>Wind Loading @ Velocity, rear</b>	317.0 N @ 150 km/h (71.3 lbf @ 150 km/h)
<b>Wind Speed, maximum</b>	241 km/h (150 mph)

## Packaging and Weights

<b>Width, packed</b>	552 mm   21.732 in
<b>Depth, packed</b>	292 mm   11.496 in
<b>Length, packed</b>	789 mm   31.063 in
<b>Weight, gross</b>	19.7 kg   43.431 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

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.
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## \* Footnotes

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