

# VVSSP-65S-R1BV2



10-port small cell antenna, 4x 1695–2690, 4x 3400–3800 and 2x 5150–5925 MHz. 65° HPBW, Internal RET and SBT

## OBSOLETE

This product was discontinued on: November 30, 2023

### Replaced By:

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>	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, 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)

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<b>Power Consumption, active state, maximum</b>	1 W
<b>Power Consumption, idle state, maximum</b>	10 W
<b>Protocol</b>	3GPP/AISG 2.0 (Single RET)

## Dimensions

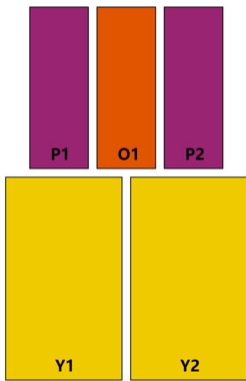
<b>Width</b>	305 mm   12.008 in
<b>Depth</b>	118 mm   4.646 in
<b>Length</b>	600 mm   23.622 in
<b>Net Weight, antenna only</b>	6.9 kg   15.212 lb

## 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

# VVSSP-65S-R1BV2



Array ID	Frequency (MHz)	RF Connector	RET (SRET)	AISG No.	AISG RET UID
Y1	1695-2690	1 - 2	1	AISG1	ARxxxxxxxxxxxxxx1
Y2	1695-2690	3 - 4			
P1	3400-3800	5 - 6	N/A	NA	N/A
P2	3400-3800	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   3400 – 3800 MHz   5150 – 5925 MHz
<b>Polarization</b>	±45°
<b>Total Input Power, maximum</b>	300 W @ 50 °C

## Electrical Specifications

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Frequency Band, MHz	1695–1920	1920–2200	2300–2690	3400–3800	5150–5925
Gain, dBi	12.6	13.1	13.5	10.4	4.6
Beamwidth, Horizontal, degrees	70	72	65	69	60
Beamwidth, Vertical, degrees	20.7	18.1	15.6	34.1	26.1
Beam Tilt, degrees	2–10	2–10	2–10	4	4
USLS (First Lobe), dB	14	18	16	15	11
Front-to-Back Ratio at 180°, dB	26	24	29	27	30
Isolation, Cross Polarization, dB	25	25	25	25	25
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 20 W, dBc	-153	-153	-150		
Input Power per Port at 50°C, maximum, watts	75	75	75	35	5

## Electrical Specifications, BASTA

Frequency Band, MHz	1695–1920	1920–2200	2300–2690	3400–3800	5150–5925
Gain by all Beam Tilts, average, dBi	12.3	12.7	12.9	9.8	3.3
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.6	±0.7	±0.6	±1.9
Gain by Beam Tilt, average, dBi	2°   12.1 6°   12.3 10°   12.4	2°   12.5 6°   12.8 10°   12.9	2°   12.5 6°   13.0 10°   13.3		
Beamwidth, Horizontal Tolerance, degrees	±6.8	±6.7	±4.5	±11	±16
Beamwidth, Vertical Tolerance, degrees	±2	±1.7	±1.6	±4.3	±2
Front-to-Back Total Power at 180° ± 30°, dB	24	21	24	18	23
CPR at Boresight, dB	22	16	15	14	10
CPR at Sector, dB	12	10	8	5	0

## Mechanical Specifications

Wind Loading @ Velocity, frontal	198.0 N @ 150 km/h (44.5 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	37.0 N @ 150 km/h (8.3 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	240.0 N @ 150 km/h (54.0 lbf @ 150 km/h)

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**Wind Speed, maximum** 241 km/h (150 mph)

## Packaging and Weights

**Width, packed** 404 mm | 15.906 in

**Depth, packed** 276 mm | 10.866 in

**Length, packed** 772 mm | 30.394 in

**Weight, gross** 9.4 kg | 20.723 lb

## Regulatory Compliance/Certifications

### Agency

ISO 9001:2015



### Classification

Designed, manufactured and/or distributed under this quality management system

## 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