

VVSSP-65S-R1B



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

General Specifications

Antenna Type	Small Cell
Band	Multiband
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	ASA, UV stabilized
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	10
RF Connector Quantity, total	10

Remote Electrical Tilt (RET) Information, General

RET Interface	8-pin DIN Male
RET Interface, quantity	1 male

Dimensions

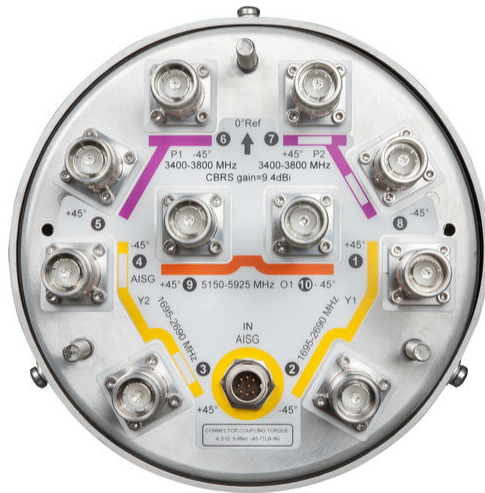
Length	600 mm 23.622 in
Outer Diameter	200 mm 7.874 in

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

Port Configuration

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Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 3400 – 3800 MHz 5150 – 5925 MHz
Polarization	±45°
Total Input Power, maximum	300 W @ 50 °C

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, active state, maximum	1 W
Power Consumption, idle state, maximum	10 W
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1

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Internal RET

High band (1)

Electrical Specifications

Frequency Band, MHz	1695–1920	1920–2180	2300–2690	3400–3800	5150–5925
Gain, dBi	11.6	12.3	12.8	9.8	4.2
Beamwidth, Horizontal, degrees	85	74	70	71	73
Beamwidth, Vertical, degrees	22.9	19.7	16	32.9	26.3
Beam Tilt, degrees	2–10	2–10	2–10	7	4
USLS (First Lobe), dB	14	16	15	11	13
Front-to-Back Ratio at 180°, dB	25	28	26	25	26
Isolation, Cross Polarization, dB	25	25	25	25	25
Isolation, Inter-band, dB	25	25	25	25	25
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	20

Electrical Specifications, BASTA

Frequency Band, MHz	1695–1920	1920–2180	2300–2690	3400–3800	5150–5925
Gain by all Beam Tilts, average, dBi	11.2	11.9	12.3	9.4	3.2
Gain by all Beam Tilts Tolerance, dB	±0.7	±0.4	±0.5	±0.8	±1.1
Gain by Beam Tilt, average, dBi	2° 11.0 6° 11.2 10° 11.2	2° 11.8 6° 11.9 10° 12.0	2° 12.1 6° 12.4 10° 12.4		
Beamwidth, Horizontal Tolerance, degrees	±8.4	±8.2	±8.5	±12	±21
Beamwidth, Vertical Tolerance, degrees	±2.4	±2	±1.3	±2.6	±4.8
Front-to-Back Total Power at 180° ± 30°, dB	18	22	20	18	22
CPR at Boresight, dB	14	17	16	15	10
CPR at Sector, dB	10	9	6	3	5

Mechanical Specifications

Wind Loading at Velocity, frontal

20.2 lbf @ 150 km/h | 90.0 N @ 150 km/h

Wind Speed, maximum

241 km/h | 149.75 mph

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Packaging and Weights

Width, packed	320 mm 12.598 in
Depth, packed	300 mm 11.811 in
Length, packed	850 mm 33.465 in
Net Weight, without mounting kit	5.9 kg 13.007 lb
Weight, gross	8.5 kg 18.739 lb

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
ROHS	Compliant



* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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