

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

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	16.0	32.9	26.3
Beam Tilt, degrees	2–10	2–10	2–10	6	6
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		
Polarization	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	50 ohm

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
USLS, beampeak to 20° above beampeak, dB	8	11	15	4	6
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

* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, [download the whitepaper Time to Raise the Bar on BSAs.](#)

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

General Specifications

Operating Frequency Band	1695 – 2690 MHz 3400 – 3800 MHz 5150 – 5925 MHz
Antenna Type	Small Cell
Band	Multiband
Performance Note	Outdoor usage
Total Input Power, maximum	300 W @ 50 °C

Mechanical Specifications

RF Connector Quantity, total	10
RF Connector Quantity, high band	10
RF Connector Interface	4.3-10 Female
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Radiator Material	Low loss circuit board
Radome Material	ASA, UV stabilized
Reflector Material	Aluminum
RF Connector Location	Bottom
Wind Loading, frontal	90.0 N @ 150 km/h 20.2 lbf @ 150 km/h
Wind Speed, maximum	241 km/h 150 mph

Dimensions

Length	600.0 mm 23.6 in
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Outer Diameter 200.0 mm | 7.9 in
Net Weight, without mounting kit 5.9 kg | 13.0 lb

Remote Electrical Tilt (RET) Information

Input Voltage 10–30 Vdc
Internal Bias Tee Port 4
Internal RET High band (1)
Power Consumption, active state, maximum 1 W
Power Consumption, idle state, maximum 10 W
Protocol 3GPP/AISG 2.0 (Single RET)
RET Interface 8-pin DIN Male
RET Interface, quantity 1 male

Packed Dimensions

Length 850.0 mm | 33.5 in
Width 320.0 mm | 12.6 in
Depth 300.0 mm | 11.8 in
Shipping Weight 8.5 kg | 18.7 lb

Regulatory Compliance/Certifications

Agency

RoHS 2011/65/EU
ISO 9001:2015
China RoHS SJ/T 11364-2014

Classification

Compliant by Exemption
Designed, manufactured and/or distributed under this quality management system
Above Maximum Concentration Value (MCV)



* Footnotes

Performance Note Severe environmental conditions may degrade optimum performance