

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

RET Interface	8-pin DIN Male
RET Interface, quantity	1 male
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1
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)

Dimensions

Length	600 mm 23.622 in
Net Weight, without mounting kit	5.9 kg 13.007 lb

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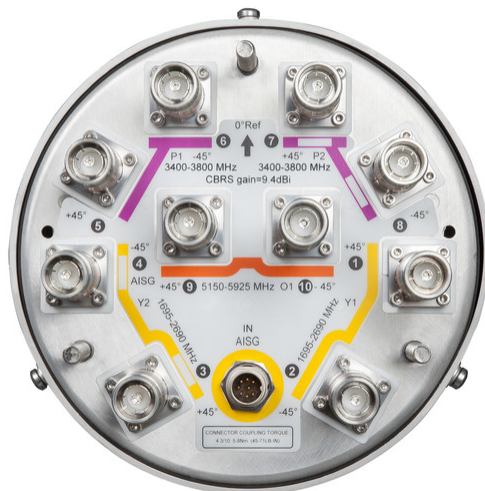
Outer Diameter

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



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

Electrical Specifications

Frequency Band, MHz	1695–1920	1920–2180	2300–2690	3400–3800	5150–5925
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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	5

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

Mechanical Tilt Range	0°-18°
Wind Loading @ Velocity, frontal	90.0 N @ 150 km/h (20.2 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 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
Weight, gross	8.5 kg 18.739 lb

Regulatory Compliance/Certifications

Agency	Classification
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



* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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