

VVSS-180HS-F2



8-port small cell antenna, 4x 1695–2690, 4x 3100–4200 MHz, heart shape pattern, fixed tilt.

- Broadband Mid Band arrays (AWS/PCS/WCS/Band 41) with 4T4R (4X MIMO) capability
- Broadband performance – optimized for CBRS and C-bands
- 4 high gain ports for the 3GHz band

General Specifications

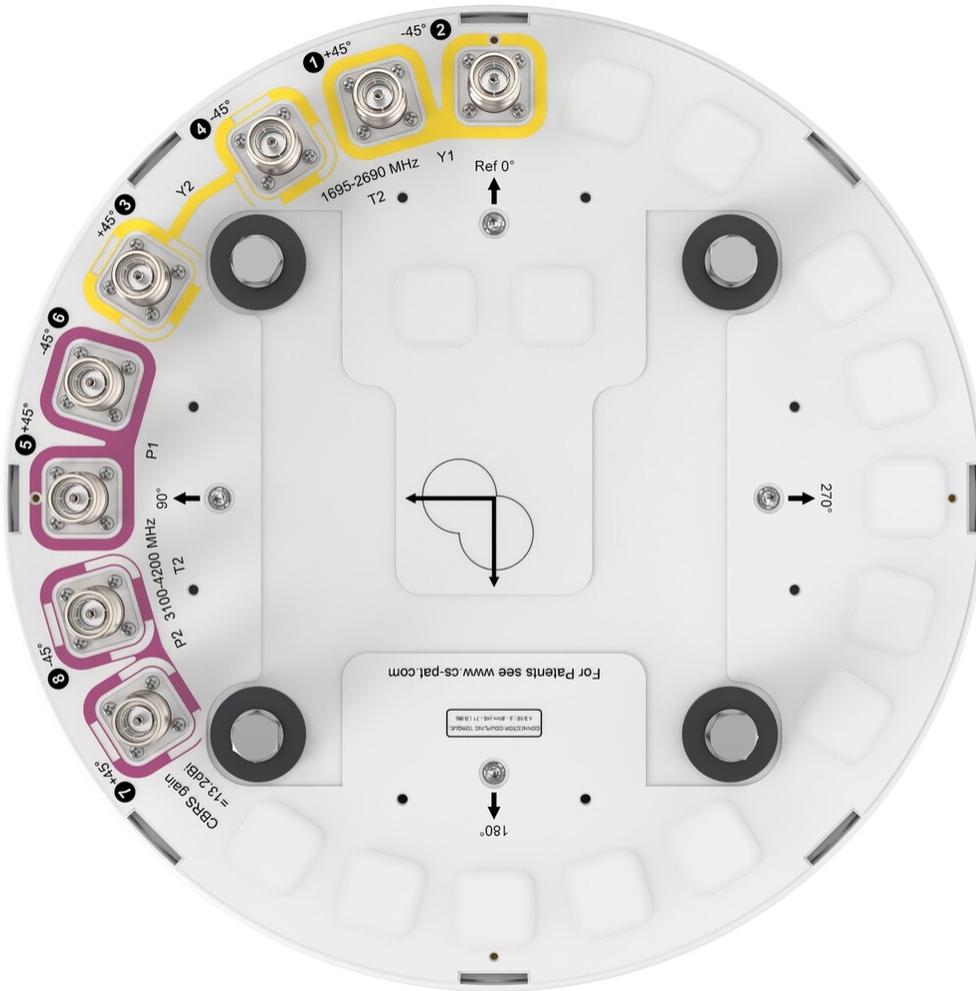
Antenna Type	Small Cell
Band	Multiband
Color	Light Gray (RAL 7035)
Grounding Type	RF connector inner conductor and body grounded to reflector and mounting bracket
Performance Note	Outdoor usage
Radome Material	ASA, UV stabilized
Radiator Material	Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	8
RF Connector Quantity, mid band	0
RF Connector Quantity, low band	0
RF Connector Quantity, total	8

Dimensions

Width	370 mm 14.567 in
Depth	370 mm 14.567 in
Length	610 mm 24.016 in
Net Weight, antenna only	12.8 kg 28.219 lb

Port Configuration

VVSS-180HS-F2



Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2690 MHz 3100 – 4200 MHz
Polarization	±45°
Total Input Power, maximum	600 W

Electrical Specifications

	Y1-Y2	Y1-Y2	Y1-Y2	P1-P2	P1-P2	P1-P2
Frequency Band, MHz	1695–1920	1920–2200	2300–2690	3100–3550	3550–3700	3700–4200
RF Port	1-4	1-4	1-4	5-8	5-8	5-8
Gain, dBi	11	11.5	11.9	12.7	13.2	12.9
Beamwidth, Horizontal,	81	89	79	80	86	79

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degrees

Beamwidth, Vertical, degrees	20.6	18.6	15.6	10	9.6	8.3
Beam Tilt, degrees	2	2	2	2	2	2
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	28	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	1.5 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-145	-145	-145
Input Power per Port, maximum, watts	200	200	200	150	150	150
Input Power per Port at 50°C, maximum, watts	150	150	150	100	100	100

Mechanical Specifications

Wind Loading @ Velocity, frontal	129.0 N @ 150 km/h (29.0 lbf @ 150 km/h)
Wind Loading @ Velocity, lateral	129.0 N @ 150 km/h (29.0 lbf @ 150 km/h)
Wind Loading @ Velocity, maximum	129.0 N @ 150 km/h (29.0 lbf @ 150 km/h)
Wind Loading @ Velocity, rear	129.0 N @ 150 km/h (29.0 lbf @ 150 km/h)
Wind Speed, maximum	241 km/h (150 mph)

Packaging and Weights

Width, packed	478 mm 18.819 in
Depth, packed	464 mm 18.268 in
Length, packed	894 mm 35.197 in
Weight, gross	16.8 kg 37.038 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance
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