

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

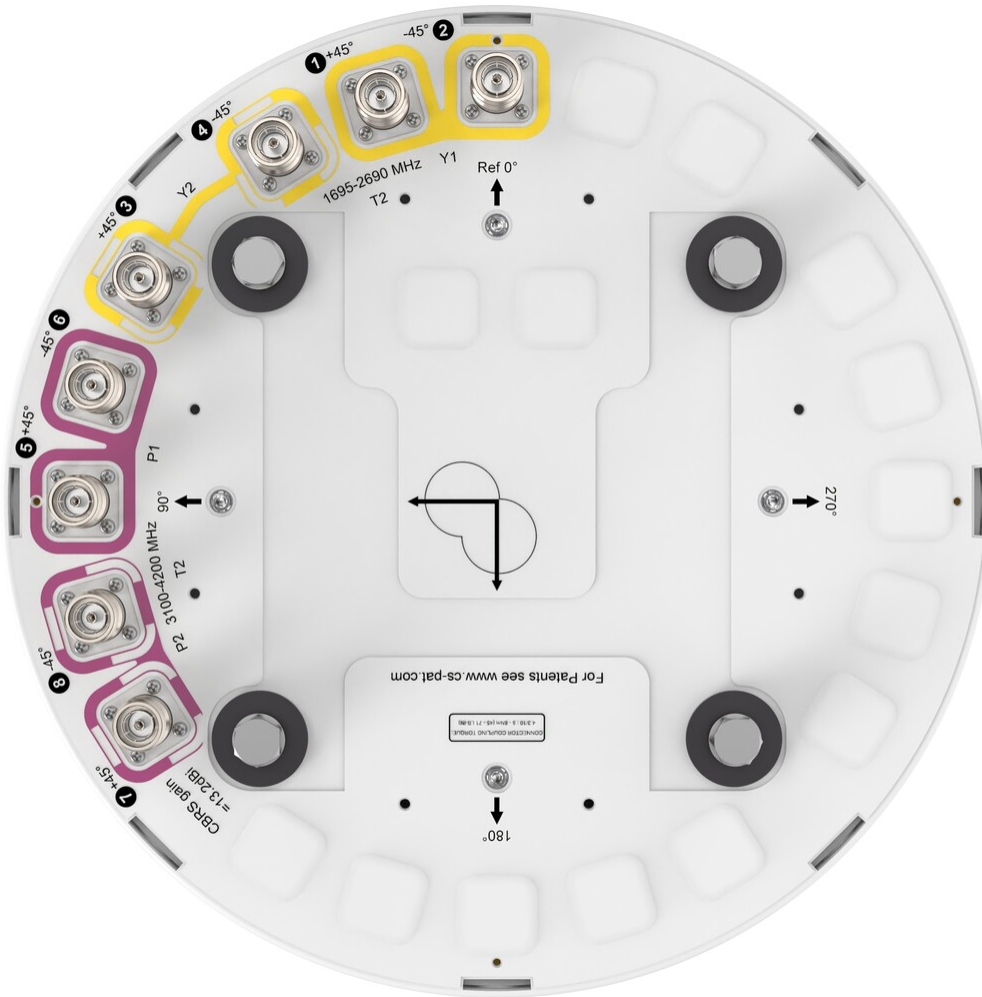
| | |
|---|--|
| Antenna Type | Small Cell |
| Band | Multiband |
| Color | Light Gray (RAL 7035) |
| Grounding Type | RF connector inner conductor and body grounded to reflector and mounting bracket |
| Performance Note | Outdoor usage |
| Radome Material | ASA, UV stabilized |
| Radiator Material | 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, low band | 0 |
| RF Connector Quantity, total | 8 |

Dimensions

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|---------------------------------|---------------------|
| 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

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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

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|-----------------------|---------------------|
| 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

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|-------------------------|---|
| Performance Note | Severe environmental conditions may degrade optimum performance |
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