

SolarEdge CSS-OD

Battery Cabinet 197 kWh

Battery Inverter 50 / 100 kW

CSS-OU-197 / PCS050

10
YEAR
WARRANTY



COMMERCIAL STORAGE SYSTEM

High-power energy storage solution for on-grid commercial and industrial sites

Easy Installation and Deployment

- Pre-assembled and factory-tested cabinet for quick setup
- Compact cabinet that can be installed indoors or outdoors, with top-lifting eye bolts for easier placement
- SolarEdge Go software accelerates configuration and commissioning
- Customize AC-coupled sites with 1 or 2 × 50 kW inverters per battery, enabling flexible deployment sizing:
 - Up to 1 MW / 2 MWh (0.5C)
 - Up to 1 MW / 4 MWh (0.25C)

Optimized Savings

- Powered by SolarEdge ONE for C&I that is designed to optimize site energy production, storage, and consumption
- Supports multiple storage optimization modes, including: maximized self-consumption, peak shaving, tariff optimization, export and import limits*

Built-in Safety and Resilience

- Layered protection approach implemented at cell, module, cluster and cabinet levels
- Multi-sensor physical security: flood, door, heat, humidity, CO, and smoke sensors
- Built-in electrical safeguards, including reverse polarity protection, earth fault, leakage fault, and surge protection
- Integrated thermal runaway and fire detection and suppression mechanisms

Single Trusted Vendor

- PV, storage and energy management systems from a single vendor
- One source for warranty, support, and training
- 10-year product and performance warranty

* Some optimization features may not be available in all regions. Possible savings may vary by country, depending on applicable tariffs and site/installation conditions.

SolarEdge CSS-OD

Battery Cabinet 197 kWh

CSS-OU-197

| BATTERY CABINET 197 kWh | CSS-OU-197 | Units |
|--|---|----------------------|
| TECHNICAL SPECIFICATIONS | | |
| Cell Chemistry | LFP | |
| Total Battery Capacity | 197.12 | kWh |
| Usable Battery Capacity | 187.15 | kWh |
| Battery Module Total Capacity | 17.92 | kWh |
| Number of Modules | 11 | |
| Maximum C-Rate (charge/discharge) | 0.5 | C-rate |
| DC Voltage Range | 616 - 792 | V _{dc} |
| AC Auxiliary Input ⁽¹⁾ | 220+/-15% /50 220+/-10% /60 | V _{ac} / Hz |
| MECHANICAL SPECIFICATIONS | | |
| Battery Cabinet Dimensions (W x D x H) | 1300 x 1200 x 2360 | mm |
| Battery Cabinet Weight | 2360 | kg |
| IP Protection | IP54 | |
| Corrosion Protection | C4 | |
| Cooling Method | Built-in HVAC | |
| Noise ⁽²⁾ | <70 | dBa |
| STANDARDS COMPLIANCE | | |
| Safety | IEC 62619, UL9540A | |
| Ingress Protection | IEC 60529 | |
| Transportation | UN 38.3 | |
| Emissions | EN / IEC 61000-6-2 EN / IEC 61000-6-4 | |
| ENVIRONMENTAL SPECIFICATIONS | | |
| Operating Temperature ⁽³⁾ | -30 to +50 (>45 derating) | °C |
| Operating Humidity | 5 to 95 (non-condensing) | % |
| Maximum Operating Altitude | 3000 | m |
| SAFETY | | |
| Fire Safety | Heat & humidity detectors | |
| | Photoelectric smoke detector | |
| | Cabinet level 2×aerosol + support external water pipe | |
| Electrical Safety | Energy Module integrated with NOVEC 1230 | |
| | Reverse polarity protection | |
| | Earth fault and leakage fault detection | |
| Operator Safety | AC and DC surge protection | |
| | Toxic gas detector (CO) | |
| Emergency Power-Off Pushbutton | Integrated | |
| Flood Detector | Integrated | |
| Door Contact Switch | integrated | |
| Pressure Relief Valves and Deflagration Panels | integrated | |
| TRANSPORTATION | | |
| Forklift | Integrated support for forklift forks >5000 | kg |
| Crane | Four eye bolts supplied | |
| WARRANTY⁽⁴⁾ | | |
| System | 10 years | |
| Performance | 8000 cycles or 10 years up to 70% SoH | |

(1) Single-phase power is required for the Battery Cabinet HVAC operation.

(2) Measured one meter from a CSS-OD Battery Cabinet Battery with a single Inverter.

(3) Power derating may apply within the range of -30 to -10 °C.

(4) For warranty details, conditions, and exclusions, refer to the Limited Product Warranty for SolarEdge CSS-OD.

/ SolarEdge CSS–OD

Battery Inverter 50 kW

PCS050

| BATTERY INVERTER 50 kW ⁽⁵⁾ | PCS050 | Units |
|--|---|-----------------|
| AC SPECIFICATIONS | | |
| Rated AC Active Power Output | 50 | kW |
| Maximum AC Apparent Output Power | 55 | kVA |
| Maximum Continuous Output Current (per phase) | 80 | A _{ac} |
| Maximum Inverter Efficiency | 97.5% | |
| AC Output Voltage – Line to Line / Line to Neutral (Nominal) | 400 / 230 | V _{ac} |
| AC Output Voltage – Line to Line / Line to Neutral (Range) | 340 – 440 | V _{ac} |
| AC Frequency | 50 / 60 ± 5 | Hz |
| AC Line ⁽⁶⁾ | 3W + PE / 4W + PE | |
| Overall Response Time | ≤ ~1.2 – 1.5 | Sec |
| Total Harmonic Distortion | <3 | % |
| Power Factor Range | -1 to 1 / leading, lagging | |
| Number of Battery Inverters per Battery Cabinet 197 kWh ⁽⁷⁾ | 1 or 2 | |
| DC SPECIFICATIONS | | |
| Maximum DC Input Power | 55 | kW |
| Maximum DC Current | 55 x 2 | Adc |
| Number of DC Input Interfaces | 2 | |
| SAFETY FEATURES | | |
| Reverse Polarity Protection | Yes | |
| Grid Monitoring | Yes | |
| Earth Fault Protection | Yes | |
| Earth Leakage Protection | Yes | |
| DC Surge Protection | Type II integrated | |
| AC Surge Protection | Type III integrated | |
| COMMUNICATION | | |
| Communication Ports | RS-485 / CAN | |
| MECHANICAL SPECIFICATIONS | | |
| Inverter Dimensions (W x D x H) | 650 x 324 x 715 | mm |
| Inverter Weight | 68 | kg |
| IP Protection | IP65 | |
| Cooling Method | Air Cooling | |
| AC Input Cable Cross Section ^{(8),(9)} / Lugs Size | 25 to 35 mm ² / M6 | |
| STANDARD COMPLIANCE | | |
| Safety | IEC 62109-1, IEC 62109-2, IEC 62477-1 | |
| Emissions | IEC 61000-6-4, IEC 61000-3-11, EN/IEC 61000-3, CISPR 11 | |
| Grid Connection | NRS 097-2-1:2017 Edition 2.1, NRS 097-2-1:2024 Edition 3, CEI-016, CEI 0-21 VDE AR-N-4105, VDE AR-N 4110 ⁽¹⁰⁾ EN 50549-1/10, RfG, NC RfG, PTPiREE UNE 217002, NTS V2.1 | |
| ENVIRONMENTAL SPECIFICATIONS | | |
| Operating Temperature | -20 to +60 (>45 derating) | °C |
| Operating Humidity | 5 to 95 (non-condensing) | % |
| Maximum Operating Altitude | 3000 | m |
| WARRANTY⁽¹¹⁾⁽¹²⁾ | | |
| System | 10 years | |

(5) It is required to have an AC-coupled SolarEdge PV system at the site.

(6) Compatible with both Delta/WYE grid types.

(7) When coupled with Battery Cabinet CSS-OD 197, the Max power is limited by the Max C rating, therefore cannot increase above 98.5kW

(8) Only copper cables should be used.

(9) It is recommended to use flexible conductors: multi-stranded, class 6.

(10) Certified for grid connection with a minimum Short Circuit Ratio (SCR) of 10 at PCC

(11) For warranty details, conditions, and exclusions, refer to the Limited Product Warranty for SolarEdge CSS-OD

(12) The Battery inverter cannot be directly used to connect life support equipment and medical equipment.