SolarEdge CSS-OD

Battery Cabinet 197 kWh
Battery Inverter 50 / 100 kW

CSS-OU-197 / PCS050





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 x 50 kW inverters per battery, and scale up to 4 MWh* storage capacity

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



 $^{^{\}star}$ Up to 1 MW active power output

^{**} 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	J
Corrosion Protection	C4	
Cooling Method	Built-in HVAC	
Noise ⁽²⁾	<70	dBA
STANDARDS COMPLIANCE		<u>, </u>
Safety	IEC 62619, including 7.3.3, UL9540A	
Ingress Protection	IEC 60529	
Transportation	UN 38.3	
Emissions	EN / IEC 61000-6-2	
LITIISSIOTIS	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	
	Energy Module integrated with NOVEC 1230	
Electrical Safety	Reverse polarity protection	
	Earth fault and leakage fault detection	
	AC and DC surge protection	
Operator Safety	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	7000 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	
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		<u> </u>
Communication Ports	RS-485 / CAN	
MECHANICAL SPECIFICATIONS		<u> </u>
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		1
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 EN 50549-1/10, RfG, NC RfG, PTPIREE UNE 217002, NTS V2.1	
ENVIRONMENTAL SPECIFICATIONS	5.12 E.1 50E ₁ (115 TE.1	
Operating Temperature	-20 to +60 (>45 derating)	°C
Operating Humidity	5 to 95 (non-condensing)	%
Maximum Operating Altitude	3000	m
WARRANTY ⁽¹⁰⁾⁽¹¹⁾		

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

⁽¹¹⁾ The Battery inverter cannot be directly used to connect life support equipment and medical equipment.