

SolarEdge CSS-OD 90

For Australia

Battery Cabinet 90 kWh

Battery Inverter BA 50 kW

CSS-OU-090 / PCS050BA



10
YEAR
WARRANTY

Energy storage solution for commercial and industrial sites

Easy Installation and Deployment

- Pre-assembled and factory-tested for quick setup
- Compact cabinet that can be installed indoors or outdoors, with top-lifting eye bolts for ease of placement
- SolarEdge Go software accelerates configuration and commissioning
- Scale up to 2 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: self-consumption, peak shaving, tariff optimization, export and import limits*

Built-in Safety and Resilience

- Integrated fire detection and suppression mechanisms
- Built-in electrical safeguards including reverse polarity protection, earth fault, leakage fault, surge protection
- Multi-sensor physical security: flood, door, and heat sensors

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 based on applicable tariffs and site/installation conditions.

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Battery Cabinet 90 kWh for Australia

CSS-OU-090

BATTERY CABINET 90 kWh	CSS-OU-090	Units
TECHNICAL SPECIFICATIONS		
Cell Chemistry	LFP	
Total Battery Capacity	89.6	kWh
Usable Battery Capacity	85.12	kWh
Battery Module Total Capacity	17.92	kWh
Number of Modules	5	
Maximum C-Rate (charge/discharge)	0.5	C
Operating Voltage	285-360	V _{dc}
Nominal Voltage	320	V _{dc}
AC Auxiliary Input ⁽¹⁾	220+/-15% /50	V _{ac} / Hz
MECHANICAL SPECIFICATIONS		
Battery Cabinet Dimensions (W x D x H)	1050 x 1371 x 2085	mm
Battery Cabinet Weight	1233	Kg
Ingress Protection	IP54	
Corrosion Protection	C4	
Cooling Method	Built-in HVAC	
Noise ⁽²⁾	<70	dBA
STANDARD COMPLIANCE		
Safety	IEC 62619, including 7.3.3, IEC 62040, IEC 62477 IEC 62619, IEC 63056, 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 – 95 (non-condensing)	%
Maximum Operating Altitude	3000	m
Storage Temperature	-30 to +50	°C
COMMUNICATION⁽⁴⁾		
Communication Interfaces	CAN, RS485, Ethernet	
SAFETY		
Fire Safety	Heat & humidity sensors	
	Photoelectric smoke detector	
	Cabinet level 2x fire extinguishers + support fire-fighting hose connector Energy Module integrated with suppression agent (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 slots	
Crane	Integrated/supplied 4 eye bolts	
WARRANTY⁽⁵⁾		
System	10 years	
Performance	8000 cycles or 10 years up to 70% SoH	
ADDITIONAL INFORMATION		
Country of Manufacture	China	

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

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

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

(4) SolarEdge One controller is required for system operation.

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

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Battery Inverter BA 50 kW

For Australia

PCS050BA

BATTERY INVERTER 50 kW ⁽⁶⁾	PCS050BA	Units
AC SPECIFICATIONS		
Rated AC Active Power Output ⁽⁷⁾	49.9	kW
Maximum AC Apparent Output Power	49.9	kVA
Maximum Charge / Discharge Power	49.9	kW
Maximum Continuous Input / Output Current (per phase)	72 / 72	A _{ac}
Maximum Inverter Efficiency	97.5	%
AC Input Voltage	230 / 400	V _{ac}
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 / 196 – 253	V _{ac}
AC Frequency	50 / 60 ± 5	Hz
AC Line connections	4W + PE	
Total Harmonic Distortion	<3	%
Power Factor Range	-0.8~0.8	
DC SPECIFICATIONS		
Maximum DC Input Power	55	kW
Maximum DC Current	80 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 III integrated	
Battery Input (DC/DC) Isolation	Yes	
AC Surge Protection	Type II integrated	
Fault Current Protection per Phase on grid	2x 160A at grid input busbar	A
Overvoltage Category (Mains)	OVC III	
Protective Class	I	
Active Anti-Islanding Method	Yes	
COMMUNICATION		
Communication Port / Protocol	RS-485 / CAN	
MECHANICAL SPECIFICATIONS		
Inverter Dimensions (W x D x H)	635 x 315 x 950	mm
Inverter Weight	80	kg
Ingress Protection	IP66	
Cooling Method	Air Cooling	
AC Input Cable Cross Section ^{(8),(9)} / Lug Size	25 – 35 mm ² / M6	
STANDARD COMPLIANCE		
Safety	IEC 62109-1, IEC 62109-2	
Emissions	IEC 61000-6-4, IEC 61000-3-11, EN/IEC 61000-3, CISPR 11	
Grid Connection	AS/NZS 4777.2:2020	
ENVIRONMENTAL SPECIFICATIONS		
Operating Temperature	-25 to +60 (derating >45)	°C
Operating Humidity	0 – 100 (non-condensing)	%
Maximum Operating Altitude	4000 (>3000m derating)	m
WARRANTY⁽¹⁰⁾		
System	10 years	
ADDITIONAL INFORMATION		
Country of Manufacture	China	

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

(7) When coupled with Battery Cabinet CSS-OD 90, the Max power is limited by the Max C rating, 0.5C, therefore, it cannot increase above 45kW

(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 SolarEdge CSS-OD