

# SolarEdge CSS-OD

## Configuration Guide for Distributors and Installers

United Kingdom

Version 1 August 2024

The CSS-OD battery cabinet and integrated 50kW inverter are designed for easy installation to reduce time on site, and include advanced battery safety technology for maximum system protection.

Powered by SolarEdge ONE, the CSS-OD enables optimized energy production and consumption for a wide range of sectors and needs.



# CSS-OD

## Battery Cabinet and Battery Inverter



- / 102.4kWh (rated)/50kW, scalable > 1MWh
- / Rated for outdoor & indoor use
- / 10-year warranty for system and 6000 cycles performance warranty, from a bankable vendor
- / Pre-assembled cabinet for minimal on-site work
  - Fast deployment
  - Reducing installation errors
- / Advanced safety
  - Fire detection & double layer of suppression
  - Built in AC + DC SPDs
  - O&M and alerting via SolarEdge ONE and Go
- / Built-in HVAC
- / Two-cluster design for resiliency
- / Weight: 1.5T

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# CSS– OD: Product Descriptions

- 50kW PCS050 Battery Inverter: Part Number PCS050-RW-400V-A01-01

A 50kW Power Conversion System (PCS) or bi-directional inverter that charges and discharges the storage system. The maximum charge and discharge rate is 50kW.

- 102.4kWh Battery Cabinet: Part Number CSS-OU-O1-20-CA-B01-01

A battery cabinet containing 102kWh of storage capacity. The cabinet has a dedicated HVAC system and fire suppression system. A maximum of 2 battery cabinets can be connected to a 50kW PCS.

- Cable extension kit: Part Number CSS-O1-C-B01-01

Required if 2 battery cabinets are to be connected to a single 50kW PCS050

- ONE controller for C&I: Part Number ONE-CLC1-RWWB0-A

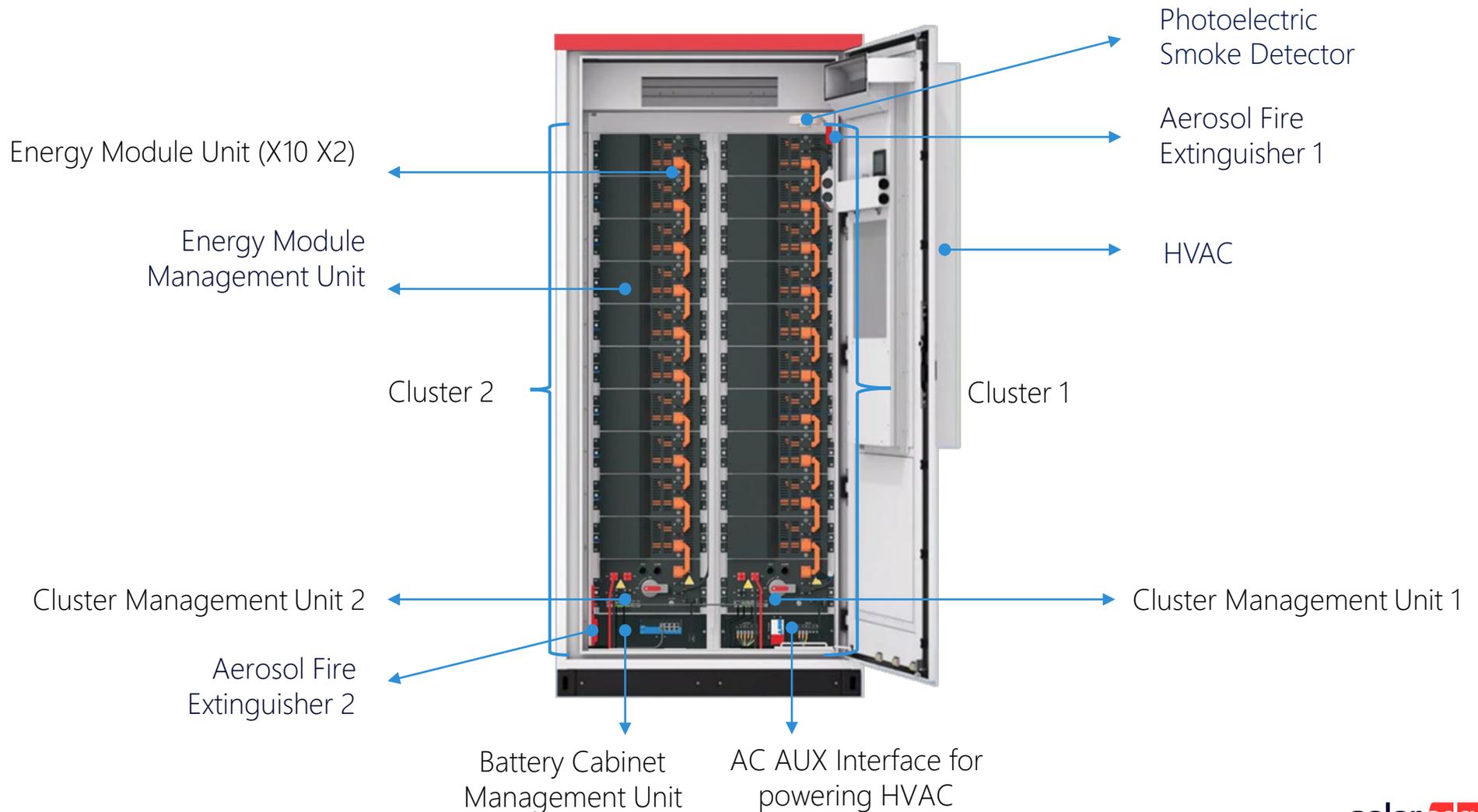
On site controller that integrates and ensures the communication of the site's energy assets including CSS-OD, existing SolarEdge inverter and energy meters. A single One Controller for C&I is need per site where the CSS-OD is installed. The SolarEdge Energy Meter must be installed onsite also.

# CSS– OD: External Structure



# CSS– OD: 102.4kWh Battery Cabinet Internal Structure

All components are supplied under the part number CSS-OU-O1-20-CA-B01-01



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# SolarEdge ONE Controller



On site hardware that integrates and ensures the communication of the site's energy assets, including energy meters, inverters, EV chargers & building loads

- / Required on all sites the CSS-OD
- / Optimizes use of locally generated energy, to minimize energy charges
- / Interfaces with third-party sensors and platforms
- / Integrated with SolarEdge environmental sensors and energy meters
- / Complies with grid regulations to enable safe, reliable electricity generation (PPC)
- / A cyber-secure gateway for external communications, designed to protect from unauthorized access

# Example Configurations:

50kW PCS with 102kWh of storage (2hrs)



Parts list required:

- 1 x PCS050-RW-400V-A01-01
- 1 x CSS-OU-O1-20-CA-B01-01
- 1 x ONE-CLC1-RWWB0-A

50kW PCS with 204kWh of storage (4hrs)



Parts list required:

- 1 x PCS050-RW-400V-A01-01
- 2 x CSS-OU-O1-20-CA-B01-01
- 1 x ONE-CLC1-RWWB0-A
- 1 x CSS-O1-C-B01-01

# Example Configurations:

150kW PCS with 306kWh of storage (2hrs)



Parts list required:

3 x PCS050-RW-400V-A01-01

3x CSS-OU-O1-20-CA-B01-01

1 x ONE-CLC1-RWWB0-A

# Example Configurations:

250kW PCS with 918kWh of storage (2hrs)



Parts list required:

5 x PCS050-RW-400V-A01-01

9x CSS-OU-O1-20-CA-B01-01

1 x ONE-CLC1-RWWB0-A

4 x CSS-O1-C-B01-01

# Useful links

[CSS-OD Datasheet](#)



**SolarEdge CSS – OD**  
Battery Cabinet 102.4 kWh /  
Battery Inverter 50 kW  
CSS-OU-20 / PCS050

**STORAGE**

**10 Year Warranty**

**Energy Storage Solution for Commercial and Industrial Sites**

- Key Installation and Deployment**
  - Pre-assembled and factory tested cabinet for quick setup
  - Compact cabinet that can be installed indoors or outdoors
  - Customer-prior AC-coupled sites with up to 2 battery cabinets and inverter by up to 100kW
- Optimized Storage Savings**
  - Powered by the SolarEdge ONE optimization platform that intelligently manages site energy production, storage and consumption
  - Supports multiple optimization modes such as Self-Consumption, Peak Shaving, and Load Optimization
  - Supports inter-tied applications\*\*
- Built to Safety and Resilience**
  - Integrated fire detection and double fire suppression mechanism
  - Built to withstand earth quake, leakage fault, and integrated DC AC surge protection
  - Reserve capacity protection
  - Over-voltage protection for higher efficiency
  - 10 different security threat detection and threat sensors
- Single-Tiered Vendor**
  - One system for PV and storage from a single vendor
  - One source for warranty, support, and training
  - 10 year warranty protection

\* See the full datasheet for more information.  
\*\* See the full datasheet for more information.

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[ONE controller datasheet](#)



**SolarEdge ONE Controller**  
For C&I  
CLC1

**5 Year Warranty**

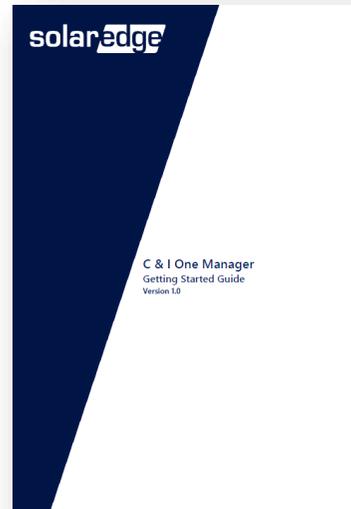
**An on-site manager that integrates local devices for maximized energy optimization**

- Optimizing the use of locally generated energy to reduce electricity costs, enabled by the SolarEdge ONE for C&I optimization platform\*
- Local communication gateway that connects the site's energy assets, including PV arrays, batteries, meters, and more\*\*
- Interface with environmental sensors to enable on-site analysis for C&I and energy optimization
- IoT platform, designed to comply with grid regulations to enable safe, reliable electricity generation
- A cyber-secured gateway for external communications designed to protect against unauthorized access
- Includes extended local data retention in case of cloud connectivity interruptions
- Supports secure over-the-air firmware updates

\* See the full datasheet for more information.  
\*\* See the full datasheet for more information.

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[ONE for C&I Getting started - Pending](#)



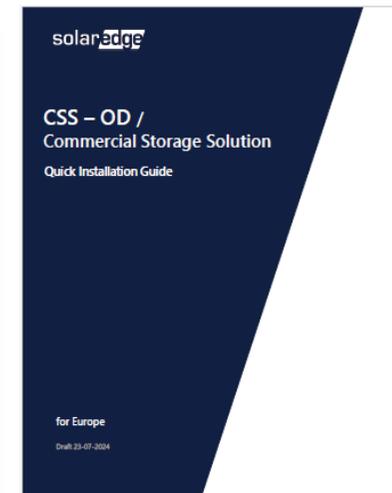
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**C & I One Manager**  
Getting Started Guide  
Version 1.0

for Europe

Draw: 23-07-2024

[CSS-OD Quick install guide - Pending](#)



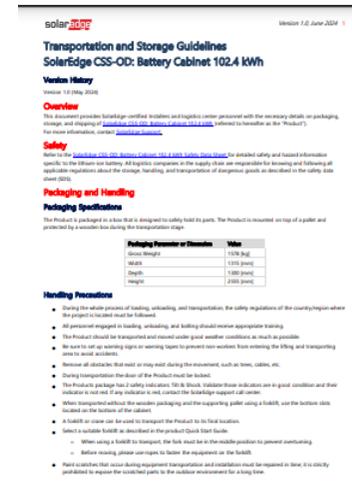
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**CSS – OD / Commercial Storage Solution**  
Quick Installation Guide

for Europe

Draw: 23-07-2024

[Transportation and storage guidelines](#)



**solaredge** Version 1.0, June 2024 1

**Transportation and Storage Guidelines**  
**SolarEdge CSS-OD: Battery Cabinet 102.4 kWh**  
Version History  
Version: 1.0 (May 2024)

**Overview**  
This document provides SolarEdge-certified installers and logistics center personnel with the necessary details on packaging, storage, and shipping. [Download the full document](#) (referred to hereafter as the "Product"). For more information, visit [solar-edge.com](#).

**Safety**  
Refer to the [Safety Manual](#) for detailed safety and hazard information specific to the battery unit battery. All logistics companies in the supply chain are responsible for knowing and following all applicable regulations about the storage, handling, and transportation of dangerous goods as described in the safety data sheet (SDS).

**Packaging and Handling**  
**Packaging Specifications**  
The Product is packaged in a box that is designed to safely hold its parts. The Product is mounted on top of a pallet and protected by a crumpled foam during the transportation stage.

Packaging Parameter or Dimension	Value
Gross Weight	1574 kg
Width	1.25 m
Depth	1.00 m
Height	2.00 m

**Handling Precautions**

- During the entire process of loading, unloading, and transportation, the safety regulations of the country/region where the project is located must be followed.
- All personnel engaged in loading, unloading, and handling should receive appropriate training.
- The Product should be transported and stored under good weather conditions as much as possible.
- The load is not an exempt item or warning label to prevent non-workers from entering the lifting and transporting area to avoid accidents.
- Remove all obstacles that may or may not exist during the movement, such as trees, cables, etc.
- During transportation the floor of the product must be leveled.
- The Product is packaged in 2 safety indicators: 10-B Shock, 10-B Vibration. These indicators are in good condition and their indicators are not red. If any indicator is not correct, the knowledge support will advise.
- When transported without the accident packaging and the support is pulled using a forklift, use the bottom disk located on the bottom of the cabinet.
- A forklift or crane can be used to transport the Product to its final location.
- Select a suitable forklift as described in the product Quick Start Guide.
  - When using a forklift to transport, the fork must be in the middle position to prevent overloading.
  - Before moving, please call upon to follow the equipment on the forklift.
- Paint scratches that occur during equipment transportation and installation must be reported to Solar Edge. It is clearly prohibited to repair the scratched parts in the outdoor environment for a long time.

SolarEdge CSS-OD | Transportation and Storage Guidelines



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Thank You