

# SolarEdge CSS-OD 107 Battery Cabinet 107 kWh

## For Europe

Battery Inverter BU 50 / BU 30  
CSS-OU-107 / PCS050B / PCS030B

### Energy storage solution with integrated backup-ready capability, for C&I 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 easier placement
- Accelerated configuration and commissioning via SolarEdge Go mobile application
- Scales up to 2.1 MWh storage capacity

#### Optimized Savings

- Integrated with SolarEdge ONE for C&I, for site energy optimization and O&M
- Supports multiple optimization modes, including self-consumption, peak shaving, tariff optimization, export and import limits
- Battery inverter designed to deliver backup power during grid outages\*

#### Built-in Safety and Resilience

- Layered protection approach implemented at cell, module, cluster, and cabinet levels
- 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, heat, CO, and smoke sensors

#### Single Trusted Vendor

- PV, storage and energy management system from a single vendor
- One source for warranty, support, and training
- 10-year/8000 cycle product and performance warranty

\* Backup functionality limited to one Battery Inverter per site and requires a firmware update expected later in 2026.



# SolarEdge CSS-OD 107

## Battery Cabinet 107 kWh

### CSS-OU-107

| Battery Cabinet 107 kWh                | CSS-OU-107                                                                                           | Units    |
|----------------------------------------|------------------------------------------------------------------------------------------------------|----------|
| <b>TECHNICAL SPECIFICATIONS</b>        |                                                                                                      |          |
| Cell Chemistry                         | Lithium Iron Phosphate (LFP)                                                                         |          |
| Total Battery Capacity                 | 107.52                                                                                               | kWh      |
| Usable Battery Capacity                | 102.14                                                                                               | kWh      |
| Battery Module Total Capacity          | 17.92                                                                                                | kWh      |
| Number of Modules                      | 6                                                                                                    |          |
| Maximum C-Rate (Charge / Discharge)    | 0.5                                                                                                  | C-rate   |
| Operating Voltage                      | 342-432                                                                                              | Vdc      |
| Nominal Voltage                        | 384                                                                                                  | Vdc      |
| A/C Auxiliary Input <sup>(1)</sup>     | 230 / 50                                                                                             | Vac / Hz |
| <b>MECHANICAL SPECIFICATIONS</b>       |                                                                                                      |          |
| Battery Cabinet Dimensions (W x D x H) | 1050 x 1371 x 2085                                                                                   | mm       |
| Battery Cabinet Weight                 | 1435                                                                                                 | Kg       |
| IP Protection                          | IP54                                                                                                 |          |
| Corrosion Protection                   | C4                                                                                                   |          |
| Cooling Method                         | Built-in HVAC                                                                                        |          |
| <b>STANDARD COMPLIANCE</b>             |                                                                                                      |          |
| Safety                                 | IEC 62619 / IEC 62040, IEC 62477 /<br>IEC 62619, IEC 63056 / UL 9540A                                |          |
| Ingress Protection                     | IEC 60529                                                                                            |          |
| Transportation                         | UN 38.3                                                                                              |          |
| Emissions                              | EN IEC 61000-6-2:2019 / EN IEC 61000-6-4:2019 /<br>EN IEC 61000-3-2:2019 / EN 61000-3-3:2013+A1:2019 |          |
| <b>ENVIRONMENTAL SPECIFICATIONS</b>    |                                                                                                      |          |
| Operating Temperature <sup>(3)</sup>   | -30 to +50 (>45 derating)                                                                            | °C       |
| Operating Humidity                     | 5 – 95 (non-condensing)                                                                              | %        |
| Maximum Operating Altitude             | 3000                                                                                                 | m        |

(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.

# SolarEdge CSS-OD 107

## Battery Cabinet 107 kWh

CSS-OU-107

| Battery Cabinet 107 kWh           | CSS-OU-107                                                                                                             | Units |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------|-------|
| <b>SAFETY</b>                     |                                                                                                                        |       |
| Fire Safety                       | Heat & Humidity                                                                                                        |       |
|                                   | Photoelectric Smoke Detector                                                                                           |       |
|                                   | Cabinet level 2xaerosol + support external DM65 water pipe                                                             |       |
|                                   | Energy Module integrated with Novec 1230 fire suppression system                                                       |       |
| Electrical Safety                 | Reverse polarity protection                                                                                            |       |
|                                   | Earth fault and leakage fault detection                                                                                |       |
|                                   | AC and DC surge protection                                                                                             |       |
| Operator Safety                   | Toxic Gas Detector (CO)                                                                                                |       |
| Integrated Safety Components      | Emergency Power Off Pushbutton (EPO), Flood Detector, Door Contact Switch, Pressure Relief Valves, Deflagration Panels |       |
| Battery Input (DC / DC) Isolation | Yes                                                                                                                    |       |
| Protective Class                  | I                                                                                                                      |       |
| <b>TRANSPORTATION</b>             |                                                                                                                        |       |
| Forklift                          | Integrated slots                                                                                                       |       |
| Crane                             | Integrated/supplied 4 eye bolts                                                                                        |       |
| <b>WARRANTY<sup>(4)</sup></b>     |                                                                                                                        |       |
| System                            | 10                                                                                                                     | Years |
| Performance                       | 8000 cycles or 10 years up to 70% SoH                                                                                  |       |

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

# SolarEdge CSS-OD 107

## Battery Inverter BU 50 kW / 30 kW

PCS050B / PCS030B

| Battery Inverter                                                 | PCS050B                                                            | PCS030B               | Units |
|------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------|-------|
| AC SPECIFICATIONS                                                |                                                                    |                       |       |
| Rated AC Active Power Output                                     | 49.9                                                               | 29.9                  | kW    |
| Maximum AC Apparent Output Power                                 | 49.9                                                               | 29.9                  | kVA   |
| Maximum Continuous Input / Output Current Protection (Per Phase) | 144/72                                                             | 87/44                 | Aac   |
| Maximum Inverter Efficiency                                      | 97.5                                                               |                       | %     |
| AC Output Voltage – Line to Line / Line to Neutral (Nominal)     | 230/400V                                                           |                       | Vac   |
| AC Output Voltage – Line to Line / Line to Neutral (Range)       | 340 – 440 / 196 – 253                                              |                       | Vac   |
| Overall Response Time                                            | 0.8 - 1.1                                                          |                       | sec   |
| AC Frequency                                                     | 50 ± 5                                                             |                       | Hz    |
| AC Line Connections                                              | 3L+PE+N / 4W + PE                                                  |                       |       |
| Total Harmonic Distortion (THDi)                                 | <3 (From current load)                                             |                       | %     |
| Power Factor Range                                               | -0.8 to 0.8 / leading, lagging                                     |                       |       |
| DC SPECIFICATIONS                                                |                                                                    |                       |       |
| Maximum DC Input Power                                           | 55                                                                 | 33                    | kW    |
| Maximum DC Current                                               | 80 x 2                                                             | 60 x 2                | Adc   |
| Number of DC Input Interfaces                                    | 2                                                                  |                       |       |
| BACKUP OUTPUT <sup>(5)</sup>                                     |                                                                    |                       |       |
| Rated AC Voltage                                                 | 230 / 400 V; 220 / 380 Vac; 3L+PE+N                                |                       |       |
| Rated AC Output Power                                            | 49.9                                                               | 29.9                  | kW    |
| Max. AC Output Power / Current (Per Phase)                       | 25 <sup>(6)</sup> /110                                             | 20 <sup>(7)</sup> /91 | kW/A  |
| Rated AC Output Current                                          | 72                                                                 | 44                    | A     |
| ATS Control                                                      | Built-in                                                           |                       |       |
| Diesel Generator Control                                         | Supported by Dry Contact (N.O)                                     |                       |       |
| Overall System Transition Time                                   | < 20                                                               |                       | ms    |
| Max Generator Input Current                                      | 110                                                                |                       | A     |
| SAFETY FEATURES                                                  |                                                                    |                       |       |
| Reverse Polarity Protection                                      | Yes                                                                |                       |       |
| Grid Monitoring                                                  | Yes                                                                |                       |       |
| Earth Fault and Leakage Protection                               | Yes                                                                |                       |       |
| DC / AC Surge Protection                                         | Type III / Type II integrated                                      |                       |       |
| Battery Input (DC / DC) Isolation                                | Yes                                                                |                       |       |
| Overvoltage Category (Mains)                                     | OVC III                                                            |                       |       |
| Protective Class                                                 | I                                                                  |                       |       |
| MANAGEMENT <sup>(8)</sup> AND COMMUNICATION                      |                                                                    |                       |       |
| Site Management, Optimization & Tracking                         | SolarEdge ONE Controller for Commercial and Industrial (C&I) sites |                       |       |
| Communication Ports                                              | RS-485 / CAN                                                       |                       |       |

(5) Backup functionality requires a firmware upgrade, available soon.

(6) Supports up to 25 kW on a single phase during unbalanced backup operation, without exceeding 50 kW total output power across all phases.

(7) Supports up to 20 kW on a single phase during unbalanced backup operation, without exceeding 30 kW total output power across all phases

(8) SolarEdge ONE controller is required for system operation.

# SolarEdge CSS-OD 107

## Battery Inverter BU 50 kW / 30 kW

### PCS050B / PCS030B

| Battery Inverter                                        | PCS050B                                                                                                                             |            | PCS030B | Units           |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------|---------|-----------------|
| MECHANICAL SPECIFICATIONS                               |                                                                                                                                     |            |         |                 |
| Inverter Dimensions (W x D x H)                         | 900 x 322 x 650 (Mounting Bracket not included)                                                                                     |            |         | mm              |
| Inverter Weight                                         | 80                                                                                                                                  |            |         | kg              |
| IP Protection                                           | IP66                                                                                                                                |            |         |                 |
| Cooling Method                                          | Intelligent Air Cooling                                                                                                             |            |         |                 |
| AC Input Cable Cross Section <sup>(9)</sup> / Lugs Size | 35-50 / M8                                                                                                                          | 20-35 / M6 |         | mm <sup>2</sup> |
| Noise <sup>(10)</sup>                                   | <70                                                                                                                                 |            |         | dBA             |
| 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                                         | CEI-016, CEI 0-21, VDE AR-N-4105, VDE AR-N 4110 <sup>(11)</sup> ,<br>EN 50549-1/10, RfG, NC RfG, PTPiREE, TorA, TorB,<br>EN-50549-2 |            |         |                 |
| ENVIRONMENTAL SPECIFICATIONS                            |                                                                                                                                     |            |         |                 |
| Operating Temperature                                   | -25 to + 60 (>45 Derating)                                                                                                          |            |         | °C              |
| Operating Humidity                                      | 0 – 100 (non-condensing)                                                                                                            |            |         | %               |
| Maximum Operating Altitude                              | 4000 (>3000 derating)                                                                                                               |            |         | m               |
| WARRANTY <sup>(12)</sup>                                |                                                                                                                                     |            |         |                 |
| System                                                  | 10                                                                                                                                  |            |         | Years           |

(9) Only copper cables should be used. It is recommended to use flexible conductors: multi-stranded, class 5 and 6.

(10) Measured at a height of 1.2 meters, one meter from a single CSS-OD Battery Cabinet and Battery Inverter.

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

(12) For warranty details, conditions, and exclusions, refer to the Limited Product Warranty for SolarEdge Commercial Storage System CSS – OD 107.