

ST245CS-S POWERSTACK

DC-COUPLED LIQUID-COOLED
C&I ENERGY STORAGE SYSTEM



More Green Power

DC/AC ratio up to 2.0
channels surplus PV directly
into storage for high-
efficiency self-consumption



Lower CAPEX

Higher efficiency through
direct PV-to-battery
charging reduces conversion
losses and lowers overall
system costs



Ultimate Safety

C5 anti-corrosion, DC SPD
type I+II, and multi-layer
fire protection

*Product renderings are for illustrative purposes only and are not shown in their actual proportions or scale.



© 2026 Sungrow. All rights reserved. Subject to change without notice. Version 1.0

NEW DC

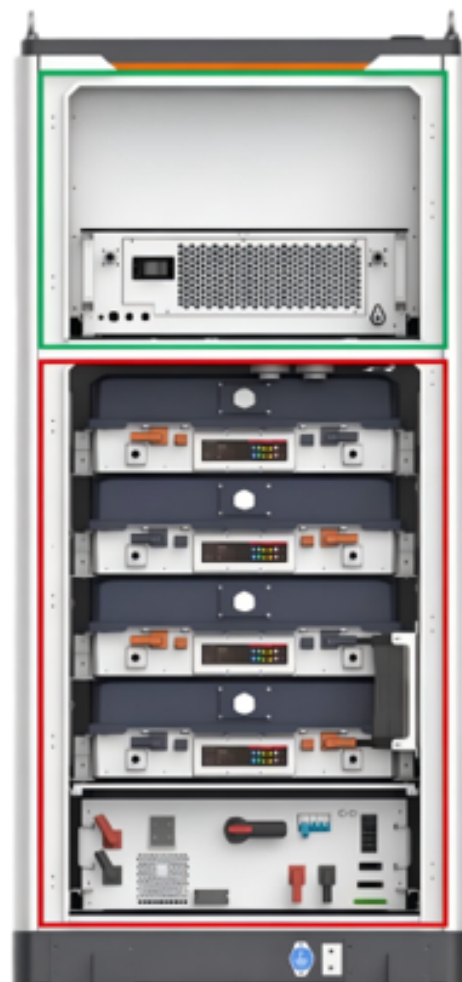
POWERSTACK SERIES

OVERVIEW

The SH125CX hybrid inverter and ST245CS-S-2H battery cabinet form a 125 kW / 249 kWh DC-coupled C&I ESS. Up to four battery cabinets can be connected to a single inverter for increased storage capacity.

SYSTEM CONFIGURATION

- SH125CX hybrid inverter
- ST245CS-S-2H battery cabinet
- Logger1000A-EU / COM100D-EU
- Junction box (for 4-8h systems)



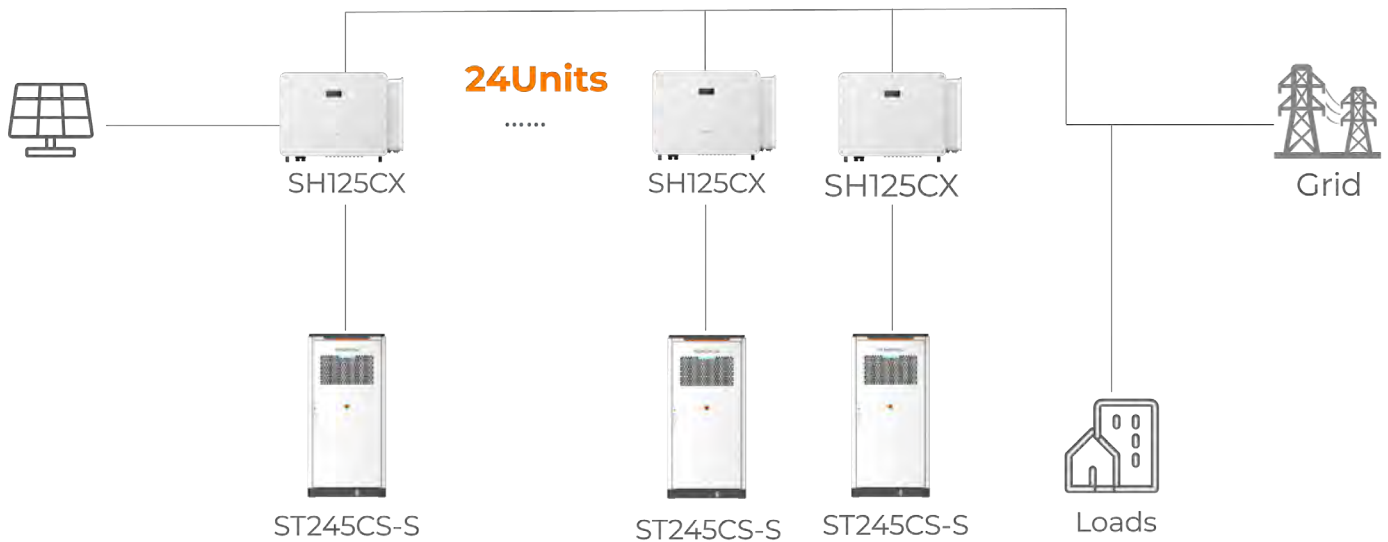
ST245CS-S-2H cabinet:
DC Switch Gear + Battery Racks

KEY DIFFERENCES VS. AC POWERSTACK (ST255CS-2H)

- Built-in PCS removed and replaced by the external SH125CX hybrid inverter (DC-coupling)
- Logger1000A-EU / COM100D-EU instead of EMS300CP
- AC distribution box replaced by a DC switchgear box
- Corrosion resistance upgraded from C3 to C5

KEY FEATURES

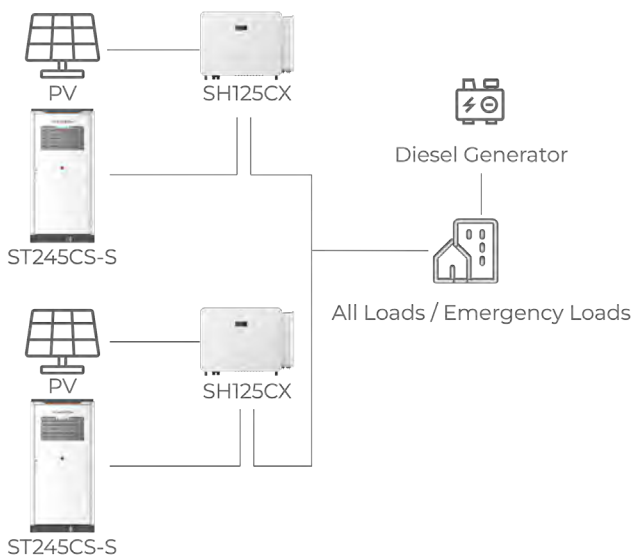
- EMS Revenue Features: VPP, peak shaving, demand-charge control, TOU optimization, zero export, self-consumption and dynamic tariffs
- On-Grid: Up to 24 hybrid inverters (3MW) in parallel



- Backup / Off-grid / Diesel generator integration: Seamless backup switching with up to 6 hybrid inverters (centralized loads) or 24 inverters (3 MW, distributed loads). Transfer time <10 ms (single) and <20 ms (multiple inverters)

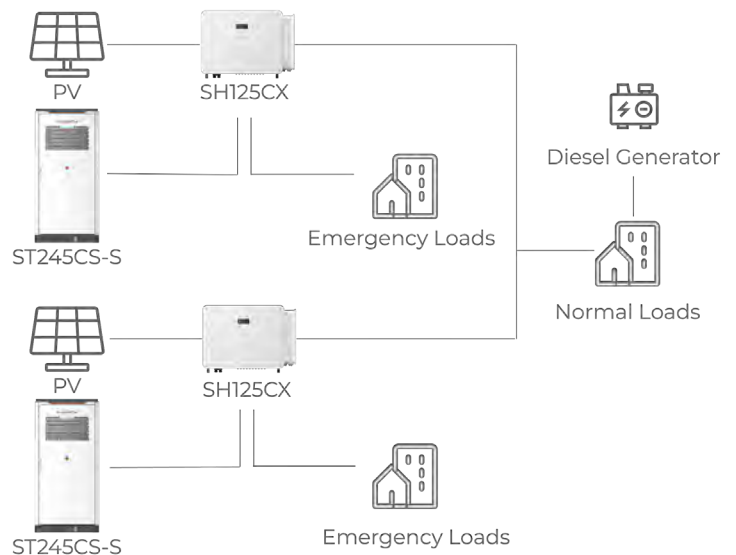
Centralized Loading (≤ 6 Units)

Parallel system: centralized connection for all loads.



Distributed Loading (≤ 24 Units)

Each backup port independently connects to emergency loads.



SAFE & RELIABLE

Electrical Safety

Advanced cell-anomaly warning and multi-stage overcurrent protection: AFCI 3.0, DC SPD Type I+II, intelligent string-level disconnection, rack- and pack-level fuses, and AI-based cell health management with online traceability.

System Safety

Early fire detection and multi-layered protection: flammable-gas, heat and smoke detection, aerosol and sprinkler extinguishing, an explosion venting panel, and a 1-hour fire-resistant enclosure.

Environmentally Friendly

Ready for all scenarios: IP65 battery packs, IP55 cabinet and IP66 inverter, with full C5 anti-corrosion for high salt-mist, sand, humidity and temperature extremes.

UPCOMING FEATURE ROADMAP

Item	Type	Production timing	Notes
Foldable venting funnel	Accessory	Q4 2026	Included in the scope of delivery after Q4 2026
Internal AUX power version	Feature	Q4 2026	Replaces the external AUX power supply on later production batches
Full DC-charger compatibility	Feature	Q4 2026	Compatible with IDC180E, IDC30E, IDC480E, IDC480E-C and IDC60/80E
Junction box	Accessory	Q4 2026	Combines up to four cabinets in parallel to form a 4-8h system
ATS1250	Accessory	Q4 2026	Enables up to 10 hybrid inverters in parallel in backup mode with seamless switching

TECHNICAL

Q&A

1

How does the ST245CS-S DC solution differ from the AC PowerStack?

The built-in PCS is removed and replaced by the external SH125CX hybrid inverter; a Logger1000A-EU / COM100D-EU replaces the EMS300CP; the AC distribution box becomes a DC switchgear box; and the corrosion rating is upgraded from C3 to C5.

2

What fire-protection methods are included?

Flammable-gas, heat and smoke detection; an aerosol extinguisher and a sprinkler; an explosion venting panel; and a 1-hour fire-resistant enclosure.

3

How fast does the system switch to backup / off-grid?

It switches to backup / off-grid mode in just 10 ms for one hybrid inverter and in 20ms for multiple hybrid inverters, keeping equipment running without interruption.

4

How many units can run in parallel?

Up to 24 hybrid inverters per plant (3 MW). For backup: 6 units for whole-site / centralized loading, or up to 24 units for partial-site / distributed loading. Additionally, the ATS1250 is going to be available by Q4 2026, which enables up to 10 hybrid inverters in parallel in backup mode with seamless switching.

5

Can I build a 4-hour system?

A Junction Box (available in Q4 2026) will allow two ST245CS-S-2H cabinets to be combined into a 4-hour system. Even up to 4 ST245CS-S-2H in parallel are possible (up to 8h). Please be aware that all hybrid inverters must be configured with the same connected battery capacity.

6

Is the system compatible with DC chargers?

From the beginning of Q4 2026 the DC chargers IDC180E, IDC30E, IDC480E, IDC480E-C and IDC60/80E are compatible.

7

Can partners commission the system themselves?

Commissioning is carried out by Sungrow staff or by trained Sungrow distributors and installers.

8

What is the difference between the internal and external AUX power version?

In the external AUX power version, AUX power for the local controller and FSS is supplied via the hybrid inverter's backup port and/or an external AUX power source. In the internal AUX power version, AUX power for the local controller and FSS is supplied internally within the ST245CS-S-2H.