



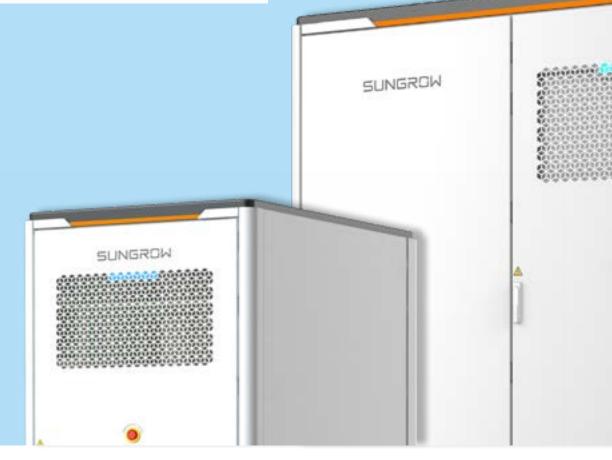
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THE NEW POWERSTACK 200CS SERIES

C&I LIQUID COOLED ESS







Fully integrated system design with pre-installation and pre-commissioning. SAFE & RELIABLE

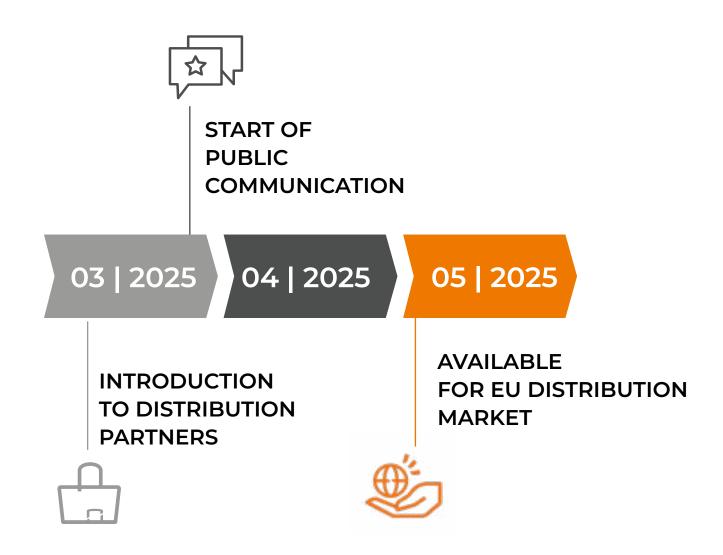
Al monitoring of cell health with early warning. Three-level fire safety design.



High-efficiency PCS with max. efficiency 98.5%. Seamless side by side connection, with up to 25 devices in parallel

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225KWH

A0SJ0599 *
* for Powerstack 2h without ventilation panel, with EMS300CP included inside
3100 kg
1150 mm * 2450 mm * 1610 mm



Article Number	COMING SOON
Single product weight	5300 kg
Single product dimension	2152 mm * 2470 mm * 1610 mm

CERTIFICATION STATUS



all major EU markets in 2025*

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^{*}please refer to our certification overview for continuous updates.

FREQUENTLY ASKED QUESTIONS

What is the battery modules' state upon delivery? The battery modules arrive pre-installed and connected within the PowerStack, reducing installation effort.

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What is the resistance corrosion protection level? The protection level is C5-L.

How many cycles does Sungrow guarantee for the battery system? Sungrow guarantees 6,500 cycles for the battery system. Please refer to the Distribution Warranty Document on Sungrow website for all updated information.

Why does the system use liquid cooling, and what are its benefits? The liquid cooling system ensures balanced heat dissipation, reducing temperature differences to ≤2.5°C. This improves efficiency, extends battery lifespan, and lowers overall system heat loss.

What fire suppression methods are included in the system?

The system includes a three-level fire safety systen, such as a detection and alarm system, an aerosol-based extinguisher, smoke detector, a heat detector and a backup system consisting of a sprinkler.

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Can partners commission the system themselves, or is Sungrow staff required? Commissioning is carried out by Sungrow staff or trained Sungrow distributors and installers.

How can I find out if the product is certified for my country? Please always check the latest certification overview on our website to ensure compliance with local regulations.

How do I connect the PowerStack to existing PV plant? If you are using Sungrow CX or CX-P2 PV inverters with Logger1000 you can control the whole system via iSolarCloud including PowerStack thanks EMS300CP optional controller.

The PowerStack is compatible with all major third party EMS systems.

MORE HARD FACTS 225KWH

	ST225kWh-110kW-2h
DC side	
Cell type	LFP 3.2 V / 280 Ah
System battery configuration	256S1P
Nominal capacity	229 kWh
Nominal voltage range	691.2 V ~ 934.4 V
AC side (on-grid)	051.2 V 554.4 V
Nominal power	110 kW
Nominal voltage	400 V
Voltage range	340 V ~ 440 V
Nominal frequency	
	50 Hz / 60 Hz
Frequency range	45 Hz ~ 55 Hz / 55 Hz ~ 65 Hz
Max.THD of current	< 3 % (Nominal power)
DC component	< 0.5 % (Nominal power)
Power factor range	1.0 leading ~ 1.0 lagging
AC side (off-grid) *	
Nominal voltage	400 V
Nominal frequency	50 Hz / 60 Hz
Max.THD of voltage	< 3 % (Linear load)
Unbalance load capacity	100 %
System parameter	
Dimensions (W * H * D)	1150 mm * 2450 mm * 1610 mm
Weight	3100 kg
Degree of protection	IP55
Auxiliary power supply	Internal power supply(Default) External power supply(Optional)
Anti-corrosion degree	C5 (Default) C3 (Optional)
Operation humidity range	0 % ~ 100 %
Operation temperature range	-30 ~ 50 (> 45 derating)
Max. operating altitude	-30 ~ 30 (~ 43 defating) 3000 m
Temperature control method	Intelligent liquid cooling
Noise	≤ 70 dB (A) @ 1 m
10056	Default@Flammable gas detector, Smoke detector, Heat detector, Alarm sounder, Aersol,
Fire suppression system	Sprinkler Optional: FK5112
Communication interface	Ethernet
Communication protocol	Modbus TCP
Standard	IEC 62619, IEC 63056, IEC 62040, IEC 62477, IEC 61000, IEC 62933, UN 38.3
Max.Parallel quantity (off-grid)	10
Transformer cabinet parameter *	
Transformer capacity	250 kVA
Primary side voltage / Secondary side voltage	400 V / 400 V (Dyn11)
Nominal frequency	
	50 Hz / 60 Hz
Dimensions (W * H * D)	1200 mm * 2000 mm * 1200 mm
Weight	1500 kg
Degree of protection	IP55
Anti-corrosion degree	C5 (Default) C3 (Optional)
Operation humidity range	0 % ~ 100 %
Operation temperature range	-30 ~ 50 (> 45 derating)
Max. operating altitude	3000 m

* The transformer cabinet is needed additionally when the system is in off-grid mode.

MORE HARD FACTS 455KWH

	ST455kWh-110kW-4h
DC side	
DC side	
Cell type	LFP 3.2 V / 280 Ah
System battery configuration	256S2P
Nominal capacity	458 kWh
Nominal voltage range	691.2 V ~ 934.4 V
AC side (on-grid)	
Nominal power	110 kW
Nominal voltage	400 V
Voltage range	340 V ~ 440 V
Nominal frequency	50 Hz / 60 Hz
Frequency range	45 Hz ~ 55 Hz / 55 Hz ~ 65 Hz
Max.THD of current	< 3 % (Nominal power)
DC component	< 0.5 % (Nominal power)
Power factor range	1.0 leading ~ 1.0 lagging
AC side (off-grid) *	
Nominal voltage	400 V
Nominal frequency	50 Hz / 60 Hz
Max.THD of voltage	< 3 % (Linear load)
Unbalance load capacity	100 %
System parameter	
Dimensions (W * H * D)	2152 mm * 2470 mm * 1610 mm
Weight	5300 kg
Degree of protection	IP55
	Internal power supply (Default)
Auxiliary power supply	External power supply (Optional)
	C5 (Default)
Anti-corrosion degree	C3 (Optional)
Operation humidity range	0 % ~ 100 %
Operation temperature range	-30 ~ 50 (> 45 derating)
Max. operating altitude	3000 m
Temperature control method	Intelligent liquid cooling
Noise	≤ 70 dB (A) @ 1m
10.00	Default : Flammable gas detector, Smoke detector, Heat detector, Alarm sounder, Aerosol,
Fire suppression system	Sprinkler
The suppression system	Optional : Ventilation system
Communication interface	Ethernet
Communication protocol	Modbus TCP
Standard	IEC 62619, IEC 63056, IEC 62040, IEC 62477, IEC 61000, UN 38.3, AS/NZS 4777.2, AS/NZS 3000
Max.Parallel quantity (off-grid)	10
Transformer cabinet parameter *	
Transformer capacity	250 kVA
Primary side voltage / Secondary side voltage	400 V / 400 V (Dynll)
Nominal frequency	50 Hz / 60 Hz
Dimensions (W * H * D)	1200 mm * 2000 mm * 1200 mm
Weight	1500 kg
Degree of protection	IP55
	C5 (Default)
Anti-corrosion degree	C3 (Optional)
Operation humidity range	0 % ~ 100 %
Operation temperature range	
Max. operating altitude	-30 ~ 50 (> 45 derating)
Temperature control method	3000 m
in polatare control method	Air cooling

* The transformer cabinet is needed additionally when the system is in off-grid mode.