

# CELL POWER

## CESS 209-50

The CESS 209-50 is developed for applications where flexibility and reliability are key. From grid reinforcement and peak shaving to charging hub buffering and energy trading. With over 9,125 cycles and a 10-year warranty, this system delivers long-lasting performance. The CESS 209-50 is developed in the Netherlands, based on 35 years of battery expertise. This results in a modular energy system with a high energy density, maximum safety, and a strong focus on cybersecurity. Thanks to local service and data management within Europe, the CESS 209-50 is the scalable solution for future-oriented energy projects.



### European quality and control

Controlled by our own software in a secure network. No external control or cloud data link outside the EU.



### Entry level system

This entry-level model provides reliable energy storage, making it ideal for smaller applications or as a first step towards sustainable energy.



### Highest safety level to even be Placed indoors

Our systems have passed the strict UL9540A test for thermal safety.



### Local service and support

Focus on local services: from installation and maintenance to training. Our Dutch specialists are ready to assist you.



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## EXAMPLE CONFIGURATIONS

2 pcs	418 kWh - 100 kW
3 pcs	627 kWh - 150 kW
4 pcs	836 kWh - 200 kW
10 pcs	2090 kWh - 500 kW
x pcs in parallel maximum	Unlimited expandability

## GENERAL INFORMATION

Dimensions (LxWxH)	1300 x 1300 x 2374 mm
Weight	~2600kg
Housing	Outdoor cabinet
Anti corrosion level	C5
Noise level	≤65dB at 2m
Protection rating	IP55
Operating temperature	-30°C ~ +50°C
Relative humidity	20% ~ 85% (Non-condensing)
Maximum operating altitude	2000m (No derating)
Thermal management system	Liquid cooling
EMS integrations (multiplatform)	WithTheGrid, Covolt, Embion, Environ, Flexecharge, Eniris and more
Communication interface	MODBUS TCP
Off-grid capability	No

## BATTERY

Battery technology	LFP (LiFePO4/ Lithium Iron Phosphate)
Nominal Energy	209,00 kWh
Nominal Capacity	314 Ah
Nominal Voltage	665,6V
Voltage range (min. - Max.)	582,4V ~ 738,4V
Cycle life @0.25C / 25°C	≥9125 cycles @95% D.o.D.; 70% EOL
DoD	95%

## INVERTER

Rated / nominal AC power	50 kW
Maximum AC power	50 kVA
Grid voltage	400V
Grid voltage range	340V ~ 440V
AC current	72A
THD	≤1,5% v (100% Load)
AC power factor	-1 (Lagging) ~ 1 (Leading)
AC frequency	50/60Hz ± 5HZ
Max efficiency	98.3%
Round Trip Efficiency (RTE)	≥92%

## SAFETY

Fire suppression system	Double fire suppression system; battery pack Aerosol and cabinet
Detection systems	Smoke, temperature, water and humidity sensors (H2 optional)
Warning systems	Sound- and indicator alarms; alarm forwarding possible (PAC)

## WARRENTY & CERTIFICATE

Warrenty	10 years
Certificates battery	UN38.3; IEC 62619; UL 9540A; UL 1973
Certificates inverter	CE; IEC 61000-6-4; IEC 62477; EN 50549-1; EN 50549-2; VDE4105/4110/4120; TÖR A/B; Synergrid C10/11; G99; CEI 0-21