

CELL POWER

CESS 430 - 200



The Energy Storage System is a cutting-edge solution designed to revolutionize the way energy is stored and utilized.

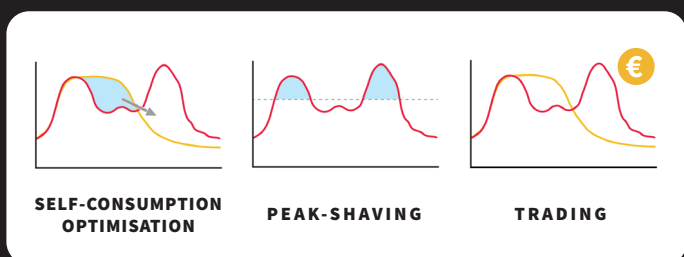
With a high energy density of 430 kWh – 200 kW in a 10ft container, the ESS boasts a compact and space-efficient design, optimizing its footprint while ensuring maximum storage capacity. The ESS is built with Lithium Iron Phosphate (LFP) batteries, renowned for their exceptional safety and longevity. With an impressive lifespan of 5000 cycles, the batteries offer sustained reliability, making them an ideal choice for long-term energy storage needs.

With the ability to seamlessly integrate additional modules, the system can be easily scaled up to meet growing energy storage requirements, making it an ideal choice for both current and future needs.

The European Energy Management System makes the system perfect for under need applications and especially trading on the European markets.

Safety is a paramount topic, the ESS addresses this with a fire suppression system, extensive certifications and the use of one of the safest battery technologies: LFP. This system significantly reduces the risk of fire by actively monitoring and suppressing any potential hazards, providing added peace of mind and safeguarding the integrity of the stored energy. Maintenance of the ESS is made easy with its accessible design, allowing for convenient and safe inspection, servicing, and troubleshooting.

Possible applications



- Renewable energy integration
- Peak-shaving
- Self-consumption optimisation
- Solving net congestion
- Back-up functionality
- Control via external EMS (for example energy trading focussed on the Dutch market)



Quality system

LFP: Safe, Long-life: 5000+ cycles, high energy density, air cooled and PGS-37-1 compatible



Experience

35+ years of battery knowledge and 10 years of lithium knowledge within Intercel



Turn-key systems

Pre-assembled, pre-tested and plug-and-play systems. Batteries, thermal management, inverters and fire suppression systems are fully integrated



Unlimited expandability

Gridconnected unlimited expandable with the right converter. It is easy to connect additional systems.

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INVERTER

Rated / nominal AC power	200 kW
Maximum AC power	250 kVA
Grid voltage	400V
Grid voltage range	340V ~ 460V
AC current	288,6A
Output THDi	<3%
AC Power Factor	0,1~1 leading or lagging (Controllable)
AC frequency	50/60 ± 2,5Hz

GENERAL INFORMATION

Dimensions (LxWxH)	2991 x 2438 x 2591mm
Weight	7,7t
Housing	10ft container
Protection rating	IP54
Operating temperature	-10 ~ 40°C (Max. -20 ~ 50°C)
Relative humidity	0%~95% (non-condensing)
Maximum operating altitude	2000m (non-derating)
Thermal management system	Air conditioner
EMS-functionality	Peak-shaving, optimised self consumption, energy trading (optional, controlled externally)
Communication interface	RS485 / MODBUS RTU, TCP
Off-grid capability	Grid-Connected only

BATTERY

Battery technology	LFP (LiFePO4 / Lithium Iron Phosphate)
Nominal Energy	430 kWh
Nominal Capacity	280 Ah
Nominal Voltage	768V
Voltage range (Min. - Max.)	672V ~ 852V
Cycle life @ 0,5°C / 25°C	80% Retention with 5000 Cycles

SAFETY

Fire supression system	NOVEC1230 (K-5-1-12)
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WARRANTY

Warranty	5 years
Certificates inverter	EN 50549, EN 61000, EN62477
Certificates battery	UL1973, UL9540A, IEC62619, CE , UN38.3
Certificates system	UL9540, UN3536

EXAMPLE CONFIGURATIONS

860 kWh – 400 kW	2 pcs
1290 kWh – 600 kW	3 pcs
1720 kWh – 800kW	4 pcs
5,2 MWh – 2,4 MW	12 pcs