

CELL POWER

CESS 280 - 125

CESS 280-125 is the perfect scalable energy storage system. 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 280 kWh in a relatively small cabinet, 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 6000 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. 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.



Superior Quality

Highly compact cabinets and containers with LFP technology offer superior energy density. Long-life: ≥ 6000 cycles and 15 years expectancy (70% EOL).



Extensive Experience

Over 35 years of battery knowledge and 10+ years of experience with lithium technology. Expert in manufacturing custom-made energy storage systems.



Turnkey systems

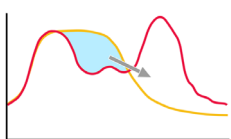
We deliver our systems plug-and-play. This means pre-assembling, pre-testing, and full integration of all the components in the Netherlands. <1 day installation time.



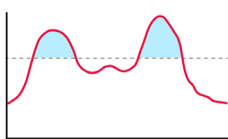
Robust safety

Ultimate protection due to superior thermal stability, dual fire protection safeguards (battery pack and cabinet). PGS 37-1 compliant.

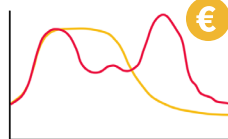
Possible applications



**SELF-CONSUMPTION
OPTIMISATION**



PEAK-SHAVING



TRADING

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GENERAL INFORMATION

Dimensions (LxWxH)	1300 x 1300 x 2374 mm
Weight	~3250kg
Housing	Outdoor cabinet
Anti corrosion level	C5
Noise level	≤75dB
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 functionality	Peak-shaving, optimized self consumption, energy trading
Communication interface	MODBUS TCP/RTU
Off-grid capability	No

BATTERY

Battery technology	LFP (LiFePO4/ Lithium Iron Phosphate)
Nominal Energy	279,55 kWh
Nominal Capacity	280 Ah
Nominal Voltage	998,4V
Voltage range (min. - Max.)	873,6V ~ 1107,6V
Cycle life @0.5C / 25°C	≥6000 cycles
DoD	90%

SAFETY

Fire suppression system	Double (batterypack and cabinet) fire suppression system
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WARRANTY & CERTIFICATES

Warranty	5 years
Certificates battery	UN38.3; IEC 62619; UL 9540A
Certificates inverter	CE; IEC 62477; EN 50549-2:2019; EN 61000

EXAMPLE CONFIGURATIONS

2 pcs	560 kWh - 250 kW
3 pcs	840 kWh - 375 kW
4 pcs	1120 kWh - 500 kW
x pcs in parallel maximum	2800 kWh - 2500 kW
	Unlimited expandability

INVERTER

Rated / nominal AC power	125 kW
Maximum AC power	138kVA
Grid voltage	400V
Grid voltage range	340V ~ 440V
AC current	180A
THD	<1,5% v (100% Load)
AC power factor	-1 (Lagging) ~ 1 (Leading)
AC frequency	50/60Hz ± 5HZ
Max efficiency	98.3%