EcoGreenEnergy



All-in-One Liquid Cooling Cabinet for C&I

- 500kW Power Conversion System
- 1044 kWh Battery Storage
- Powered by HERMES EMS
- Integrated STS
- Liquid Cooling & Fire Safety System

EGE GAIA Core AIO

500kW/1044kWh AC

HERMES Energy Management System

- Multi-site strategy deployment
- Multi level alarms from system to cell level
- Integrated work order management
- Third party system integration
- Early stage configuration
- Customizable site topology
- Five-level account management
- End-user kiosk mode

Fast Deployment

· Easy transport and installation in 24h
· Plug & Play instant AC connection

Safe & Reliable

· 8000+ cycles IP65 Batteries
· Outdoor IP55 Container
· Multi-level fire protection

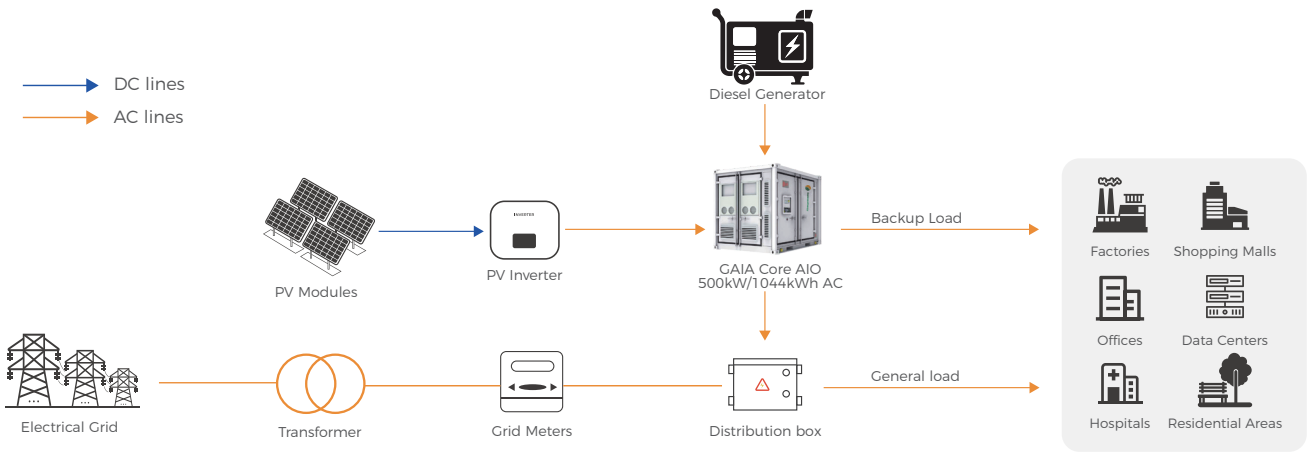
Remote O&M

· Online monitoring interface
· In-real-time internal diagnosis
· Daily electrical, financial and environmental report

Strategies

· Energy Arbitrage
· Peak Shaving
· Load Shifting
· Self-Consumption
· Backup Power
· Microgrid & Islanding

System diagram



EGE GAIA Core AIO 500kW/1044kWh AC

Battery Data

Cell Chemistry	LFP / 314 Ah
Rated Energy	1044 kWh
Configuration	4P52S5S
System Voltage (Nominal)	832 V DC
Voltage Range	728 – 936 V DC
Cycle Life / System Service Life	> 8,000 cycles / 15 years

Electrical AC Data

Rated AC Power (PCS)	500 kW
Rated Output Current	722 A
Conversion Efficiency	≥98.5%
Max. Parallel Units	No parallel function
Rated Grid Voltage	400 V AC
Grid Frequency	50 Hz / 60 Hz
THDi	THDi ≤ 3%
Power Factor	0.99 / –1 ~ +1

Backup

Max. Backup Load Port Current	800A
Max. Backup Load Power*	350kW (70% of Rate Output Power)

Performance & Environment

Charge/Discharge Rate	0.5 P
Operating Temperature	–25 ˚C ~ +55 ˚C (derating above 45 ˚C)
Storage Temperature	–20 ˚C ~ +55 ˚C
Operating Humidity	0 – 95% RH
Altitude	≤ 3,000 m (derating above 2,000 m)
Noise	≤ 80 dB

Safety & Compliance

IP Rating	Container : IP55 / Batteries : IP65
Cooling Method	Battery : Liquid cooling / PCS : Forced air cooling
Fire Suppression	Pack-level aerosol + Container-level aerosol + Water spray system
Certifications	UN3536, IEC62477-1, IEC62619, IEC63056, UL9540A | Grid codes: EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11
Protocols	Modbus TCP/IP
Communication	EMS : RS485 & Modbus-RTU BMS : CAN
EMS/BMS	Integrated

Logistics

Weight	14 t (14,000 kg)
Dimensions (WxDxH)	2,991 × 2,438 × 2,896 mm
Transportation	Direct Loading

*Note: The value indicated herein is a recommended reference based on PF=0.7. When the load involves motors or other types of impact loads, it is recommended to equip the system with a soft starter. Please contact Eco Green Energy for further technical support prior to order placement.

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