



eLumina Global

DS400

400kW / 350kWh

Battery-integrated EV Charger

DS400



Product overview

The DS400 Charging System is our flagship battery - integrated ultra-fast DC charging system, making it easy to deploy an ultra-fast EV charging hub virtually anywhere. It enables ultra-fast, grid-independent charging for heavy vehicles from mining corridors to remote highways.

The 350kWh liquid-cooled LFP battery integrated in the DS400 enables ultra-fast EV charging at grid-constrained or off-grid locations. Its skid-mounted system design enables rapid deployment, with dynamic power allocation for charging up to 6 vehicles, making it a flexible solution for different size fleets.

The DS400 leverages modern technologies to maximise energy efficiency, safety, and performance in different environmental conditions.



Product components



DS400 Power Cube

- Max 400kW EV charging power shared with up to 6 vehicles
- 350kWh integrated liquid cooled 1C battery
- Built-in Energy Management System & smart power allocation
- Optional MPPT modules for direct coupled solar PV input



DI 250 Dispenser

- Air cooled
- Max 250kW charging power for air cooling charging connector
- Max 3 Dispensers / 6 connectors working in parallel



DI500 Dispenser

- Liquid cooled
- Max 400kW charging power for liquid cooled charging connector
- Max 3 Dispensers / 6 connectors working in parallel
- Can be mixed with DI 250 dispenser
- A single connector version of the DI500 available



Overhead Charging Dispenser

- Air cooled
- Max 300kW Charging capacity
- Max 6 Dispensers / 6 connectors working in parallel
- Smart power allocation

Product datasheet

400kW/350kWh BES All in One Battery Charger

AC Grid Interface	AC input voltage	45-65Hz/3-phase+(N) +PE/260Vac-530Vac
	AC max input power	70kW
	AC max output power	70kW
Electric Vehicle charging	EV charging point	Max 6 connectors, 3 dispensers with dual-connectors or 6 single overhead connectors
	EV charging power	Max 400 kW
	EV charging power transfer	Dynamic power transfer to maximise power efficiency
	EV charging voltage	150V~1000V
PV MPPT Input (Optional)	PV input	Max 2 channels
	PV input	Max 2 * 40kW MPPT
Metering	AC grid side	1 AC energy meter, optional MID meter
HMI	10" TFT touch screen, 2 RGB LED, E-STOP, battery alarm light and beeper	
Dimensions	W * H * D mm = 2800 * 2200 * 1400 mm	Weight: <6500 kg

Power Module Configuration

Max 12 Power Module Slots for The Configuration	ELMPPT40A	DC2DC converter, 40kW/1kV, MPPT support	Max 2 * 40kWp solar power input support (optional), replaces 1 x ELACDC35L
	ELDCDC40M	DC2DC converter, 40kW/1kV	Max 10 * 40kW DC bus discharging power/EV charging power (default configuration)
	ELACDC35L	Bidirectional AC2DC inverter, 35kW/1kV	Max 2 * 35kW AC feedback power, replaces 1 x ELMPPT40A

Product datasheet continued

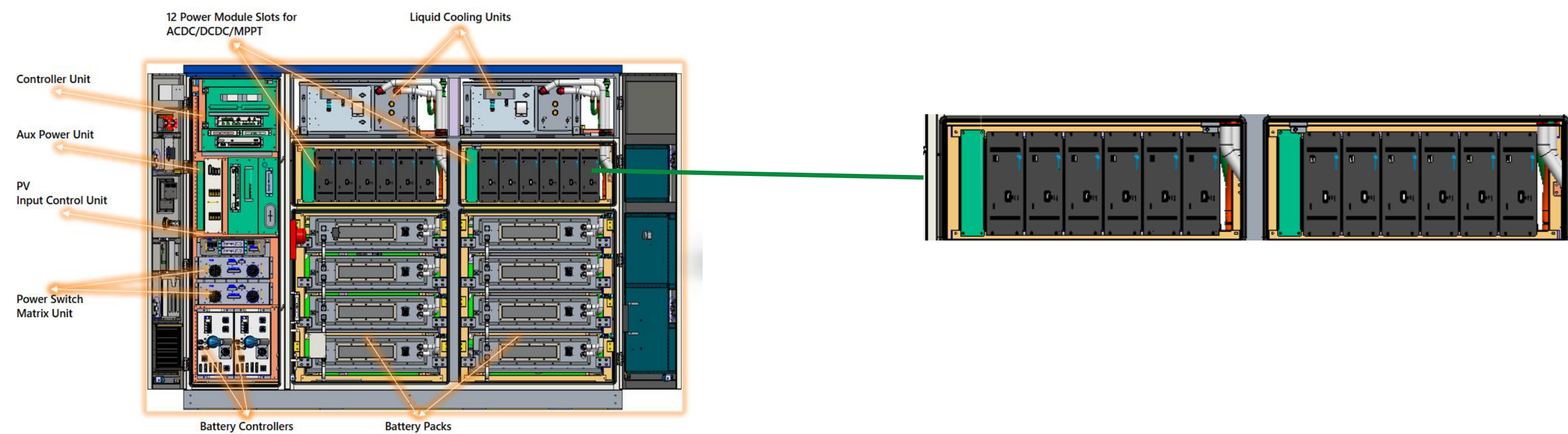
Charging Dispenser		DI 250	DI 500
Cooling Type	Air cooling		Liquid cooling
Max Charging Power	250kW		500kW
Max Connection	Max 3 dispensers / 6 connectors working in parallel		
Charging Connector Capacity	CCS2: 250A /500A		
Noise	≤60dB @30°C @rated input and output full power		
2 * 175kWH Liquid Cooled Battery Rack			
Energy Storage Battery	Two groups 175kWh/285Ah liquid cooled battery rack. Battery volt: 537.6~691.2VDC, 1P discharge, max 1.1P discharge 10 min		
High Voltage Control Box	Two HV control Units		
Battery BMS	2 level BMS structure: battery pack BSU + HV control BMU		
Thermal Management	Two liquid chilling unit with 8kW refrigerating and 2.5kW heating capacity each		
Fire Suppression System	Aerosol fire extinguishing system		
Safety Design	Explosion-proof board configuration and fire-proof structure design		
Environment Sensor	Water sensor + temperature sensor + humidity sensor + door access sensor + smoke detector + combustible gas detectors		
Protection Class	IP67 battery pack, IP55 Battery cabinet area		
Certification	Full TUV CE, RCM		
Payment Methods Accepted	Optional EFTPOS terminal		



Option 2 combination

Option 3 combination

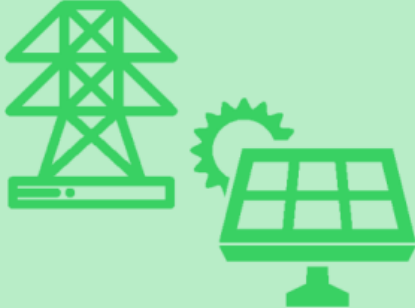
Modular design (Cont)



Power Module Configuration Matrix

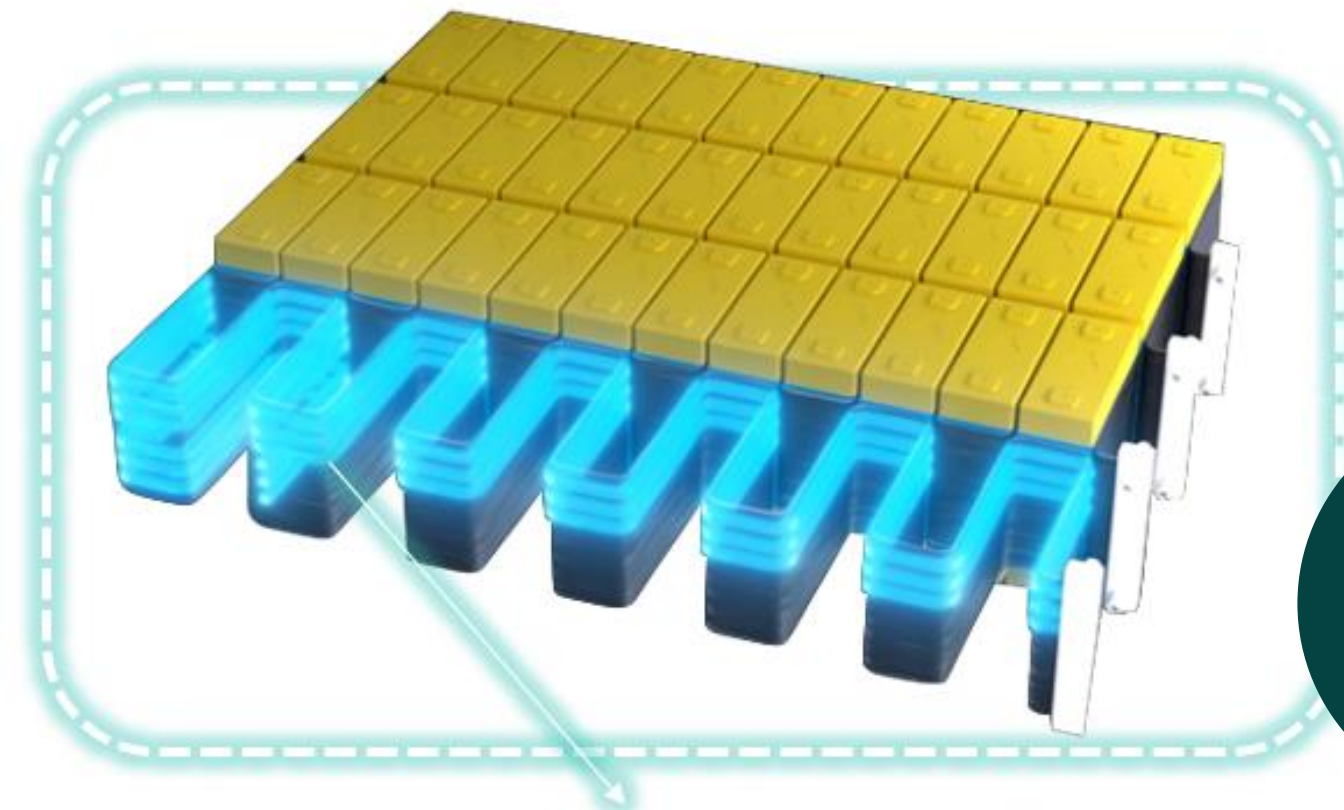
Options	Module Combination	AC input	PV input	DC input	Max Charger Output
1	2xACDC+ 10xDCDC	70kW	0	400kW	400kW
2	2xACDC+ 1xMPPT+ 9xDCDC	70kW	40kW	360kW	360kW
3	2xACDC+ 2xMPPT+ 8xDCDC	70kW	80kW	320kW	320kW

Product highlights

Resilient & Reliable System Design	Charging Capability	On or Off-grid Operations	Flexible & Scalable Support	Smart & Connected Operations	Resilient & Reliable System Design
 Dual redundant battery modules, advanced dual-loop liquid cooling, and True 1C battery technology ensure uninterrupted operation and long system life.	 Up to 400 kW ultra-fast DC charging for heavy vehicles and buses, delivering full passenger EV charging in under 15 minutes. Perfect for high-throughput depots, logistics fleets and public transport needing rapid turnaround.	 Integrated 350 kWh battery and 400kW output with less than 70 kW draw on the grid Versatile Optional solar PV and diesel genset compatibility for full independence.	 Skid-mounted system allows rapid plug-and-charge installation in under a day. Supports up to 3 dispensers/ 6 connectors and dynamic power allocation.	 AI-enabled remote monitoring, predictive maintenance, and OTA firmware updates. Supports B2G / B2L / VPP integration for energy optimisation and revenue.	 Integrated battery storage, optional PV and intelligent EMS enable hybrid grid-connected and off-grid operation, supporting peak load shaving, power capacity expansion and resilient EV charging.

Designed for Australia's harsh conditions

DS400 is purpose-designed for Australia, combining IP65-rated outdoor protection, liquid-cooled battery architecture, multi-level safety systems and low-noise operation to ensure safe and reliable deployment in public environments.



Serpentine cooling channel design

Australia
Ready



IP65 Protection, anti-rust,
anti-dust



Dual Loop Cooling System to
optimise ambient temperature
performance



Microgrid Capability to support
operation in weak or grid-constrained
environments



Low noise (<55dB) Design for noise-
sensitive urban and regional
environment

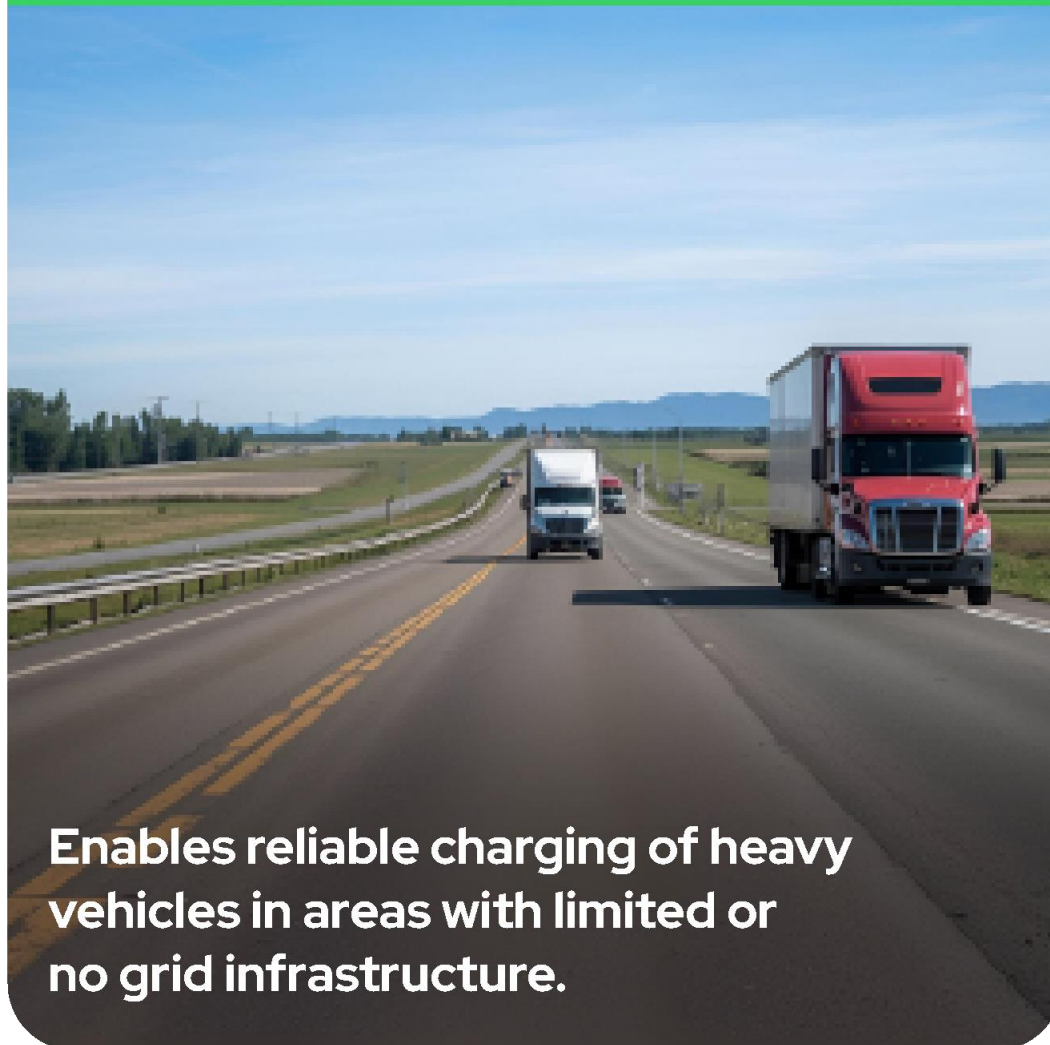


Multi-level safety architecture from cell to
system level to minimise failure risks and
protect customers' long-term operational
safety.

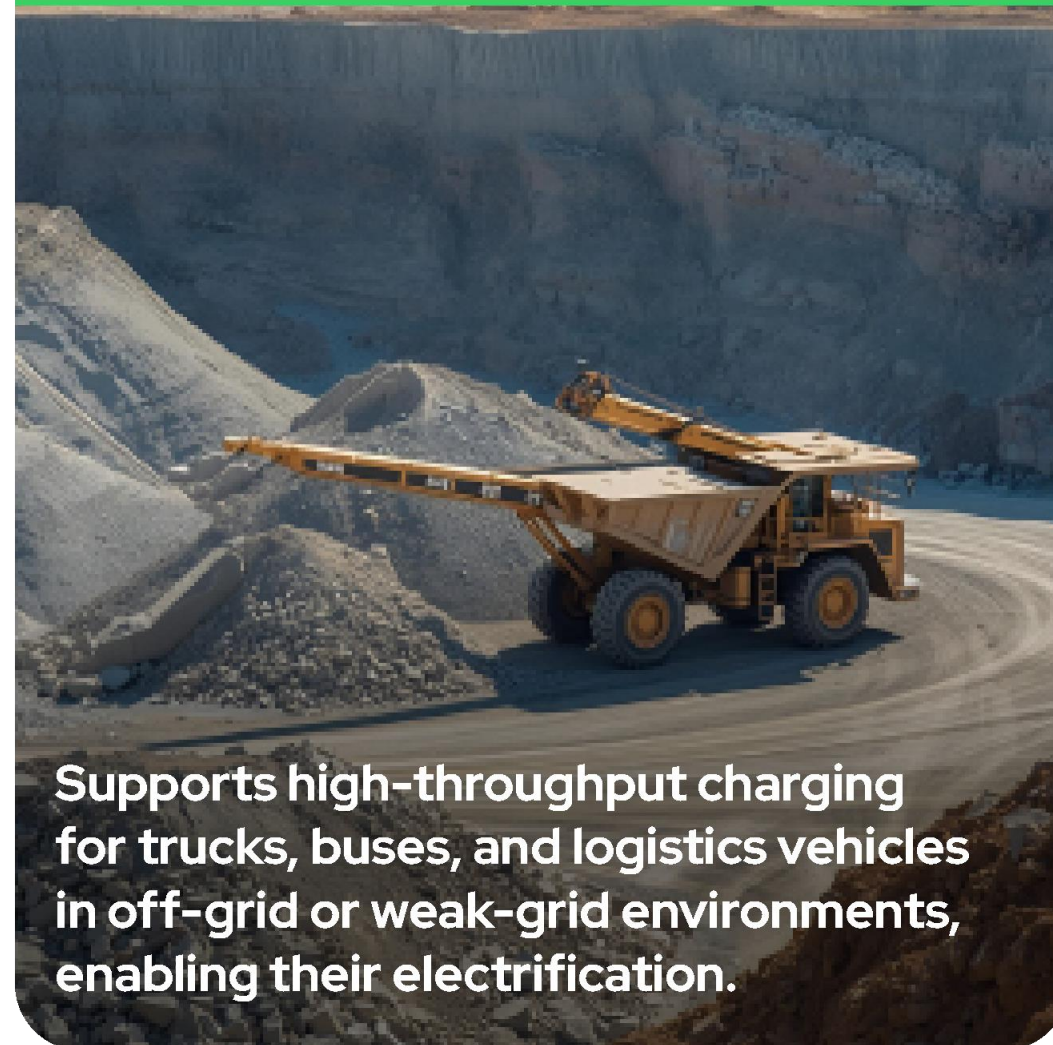
Operating scenarios

The DS400 charging system is engineered for flexibility, enabling reliable high-power charging across a wide range of environments.

Remote Highways & Regional Freight Routes



Mining & Industrial Operations



Rapid Deployment & Temporary Operations



Containerised solution

CUSTOMISATION
SUPPORT



Safety & Protection

Enclosed,
UV- and
dustprotected
container ensures
electrical safety.



Modular & Customisable

Modular design
supports flexible,
project-specific
customised
configurations.



Rapid Deployment

Factory-built,
pre-tested system
enables rapid
plugand- play
deployment.



MBE platform overview

Management

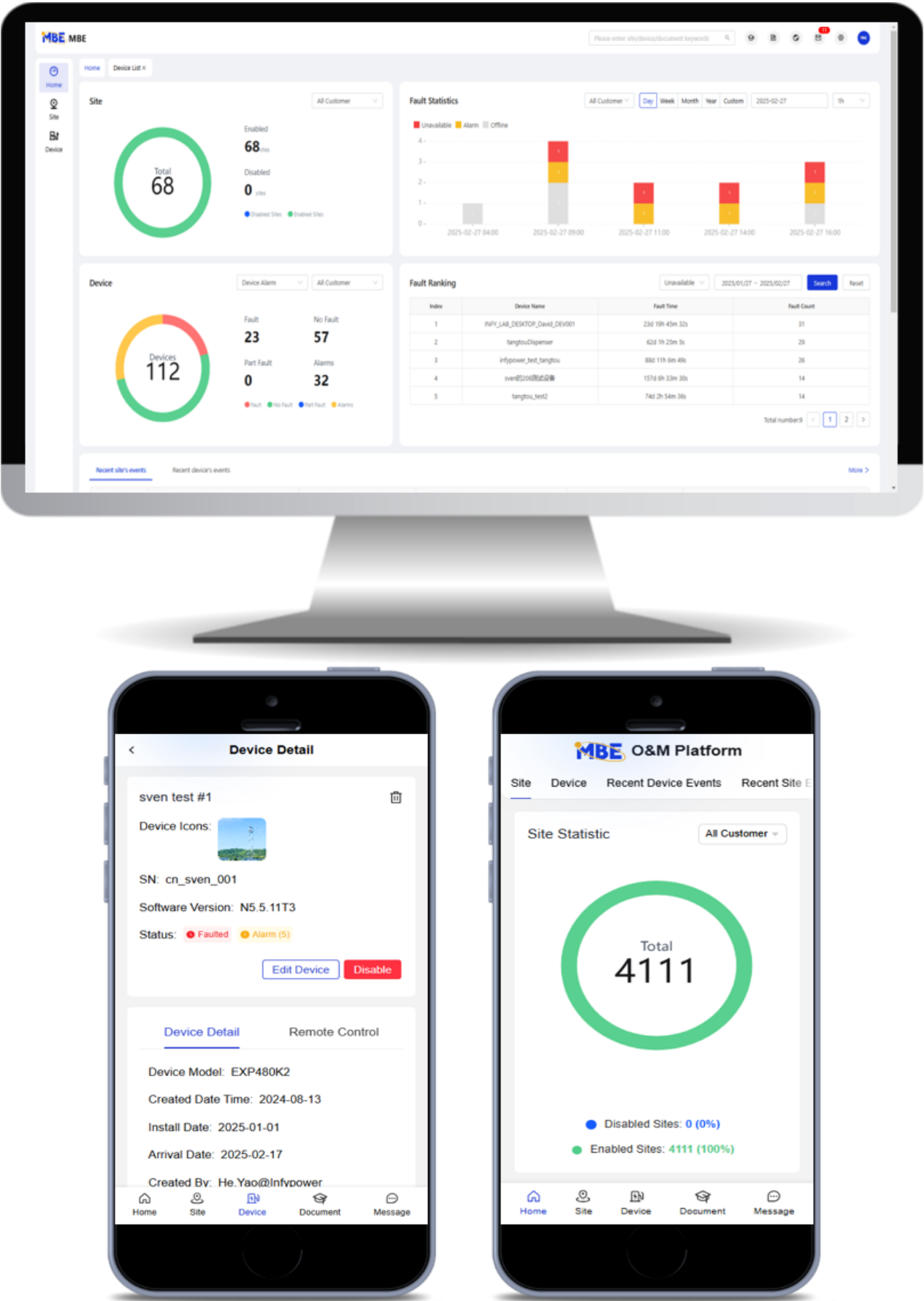
The MBE platform provides a unified interface to manage multiple chargers, BESS, and V2G devices. It uses a tiered Customer-Site-Device architecture with role-based access control to ensure secure and efficient operations.

Maintenance

With built-in remote diagnostics and one-click software/firmware upgrades, MBE reduces on-site visits and lowers maintenance costs. Timely alerts and extended reporting functions support proactive and efficient service management.

Monitoring

MBE enables real-time monitoring of device status, alarms, and performance data. Operators can remotely reset devices and track usage, ensuring early detection of issues and continuous uptime.



MBE advantages



01

Expandable Device Support

Designed for scalability, enabling seamless integration of diverse device types. It currently supports EV chargers, energy storage systems, hybrid charging-storage solutions, and V2G (Vehicle-to-Grid) devices, ensuring long-term adaptability.

02

Optimised Communication Efficiency

MBE leverages the lightweight MQTT protocol, which minimises message size and transmission overhead. By using an optimised data model where only identifiers are exchanged, the platform further reduces communication load and enhances efficiency.

03

Advanced Management Capabilities

Through its intuitive web-based user interface, MBE provides operators with remote access to local device services, offering a wide range of management functions that improve visibility, control, and operational flexibility.

04

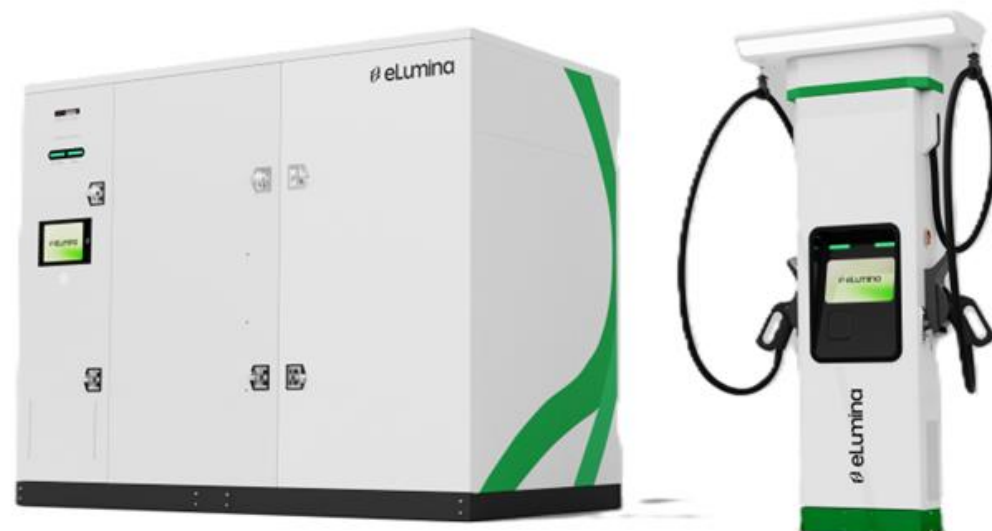
Comprehensive Extended Features

The platform delivers detailed reports covering device alarms, errors, and data usage. A built-in Notification Center ensures timely alerts, while the Support Center improves user knowledge and maintenance efficiency, supporting smooth and reliable operations.

Certifications



CB Certification



UL9540A Certified: Verified safety during thermal runaway conditions.

Safety Certification

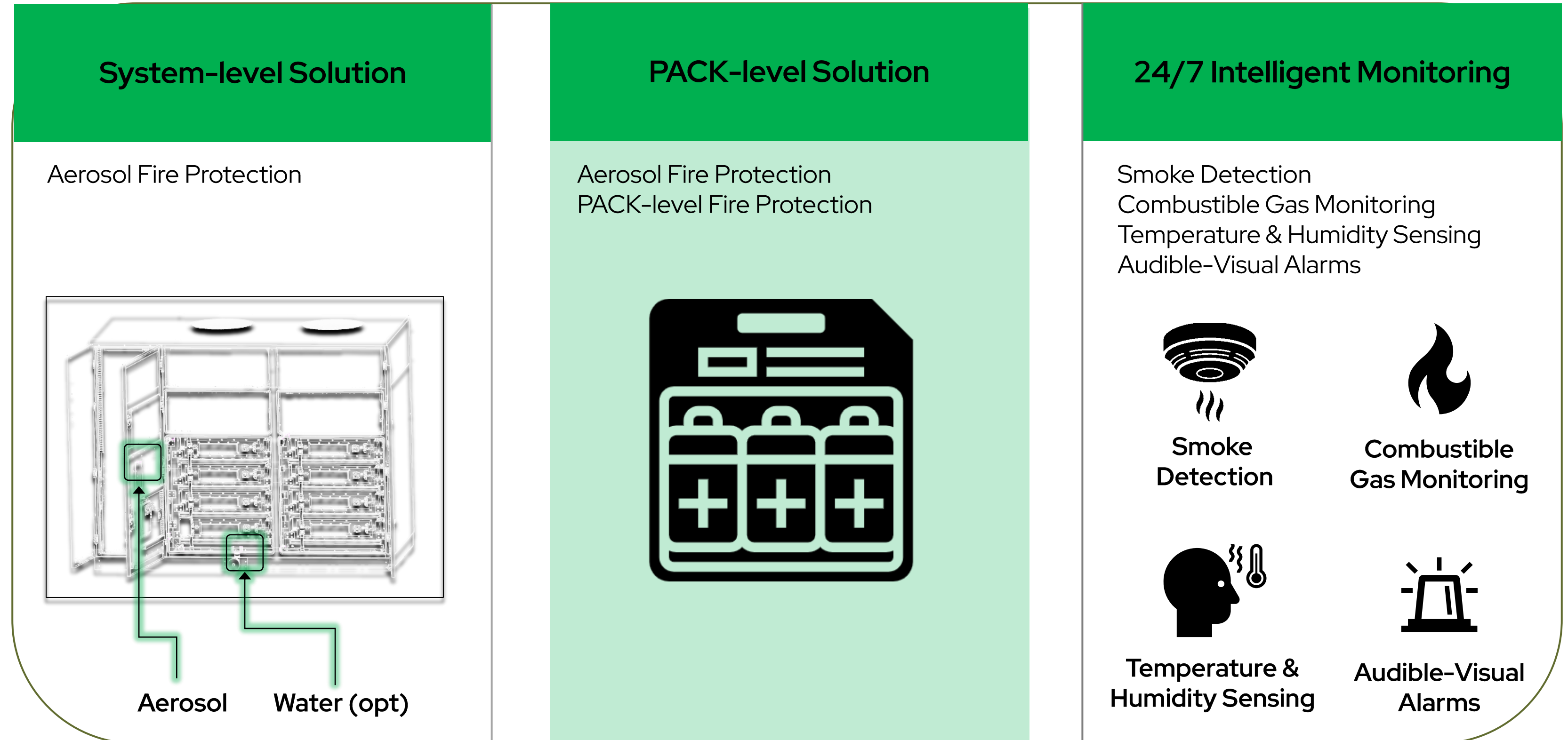


RED Certification



Multi-level safety management

Integrated Fire Protection Solution



Get in touch

Reach out to eLumina for expert guidance on renewable energy solutions, tailored to empower sustainable growth and innovation.

Contact Information

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