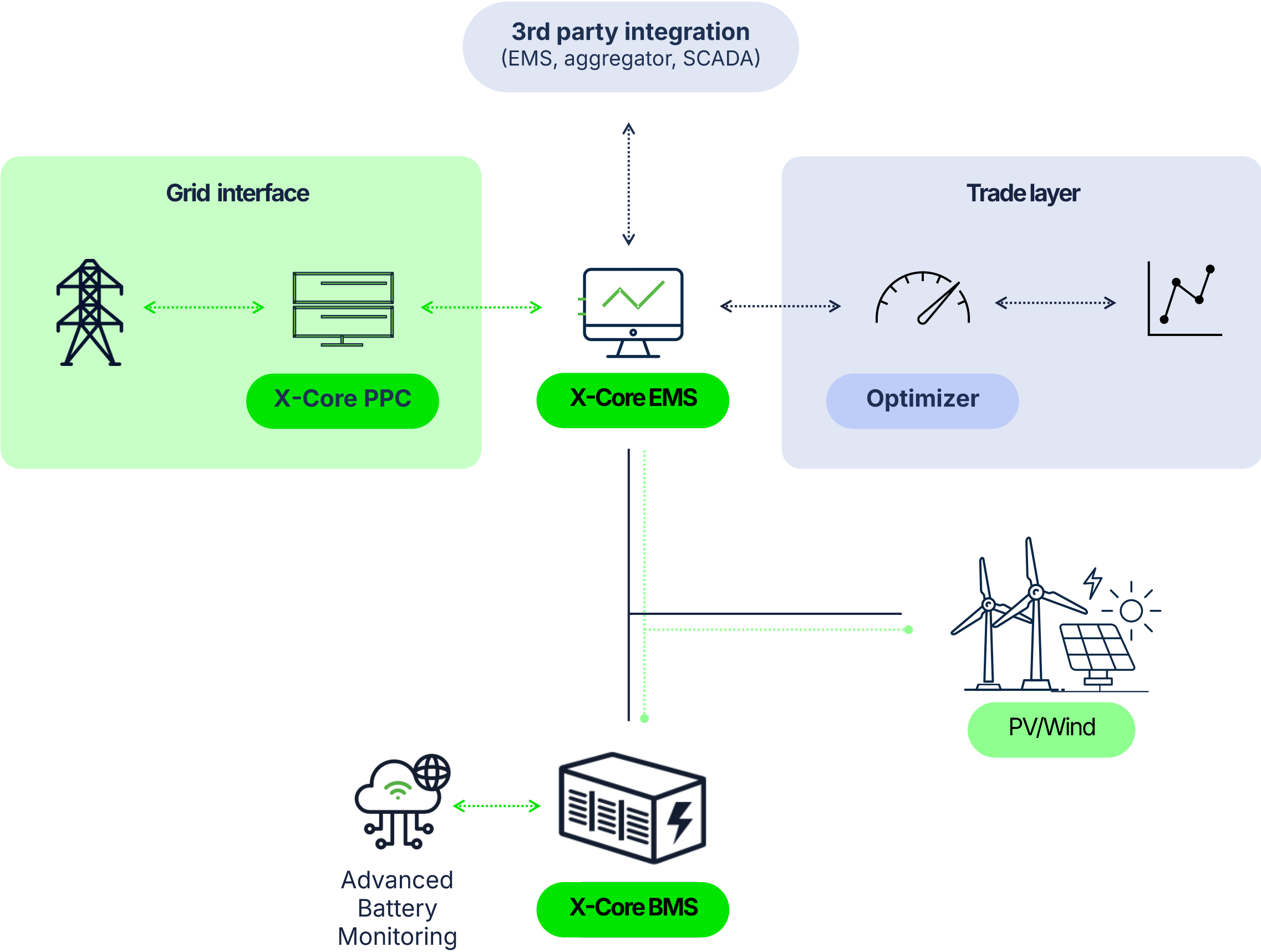


X-Series

X-Core

Battery, Energy and Data

Unified solution for real-time control and monitoring, smart alarms, and advanced analytics



- **X-Core BMS:** Dedicated three-level architecture (cell>rack>container) for the optimal internal control of the battery. Monitors all parameters of battery cells in real time to protect the battery and ensure its safety.
- **X-Core EMS:** Master datalogger and controller. Dispatches grid interface and trade layer instructions. Coordinates energy (BESS, PV, wind) with real-time monitoring and system supervision.
- **X-Core PPC (optional):** Advanced local data-logging and control features to meet grid requirements: accurate power dispatch, fast frequency regulation, inertia support.
- **Trade layer:** Energy arbitrage, ancillary services.
- **FTM/BTM applications:** Peak shaving, energy shifting, load balancing, backup power & offgrid operation, PV self-consumption, community battery, power boost, voltage support, local flexibility, phase balancing, active power compensation, and more.
- **PV/Wind:** Straightforward integration with real-time control and visualization, smart alarms, advanced analytics.

Battery cell monitoring (30 sec)

Proactive System Management

24/7 Safety Surveillance

Predictive Maintenance

AI-Powered Energy Optimization

Operating System	Secure Linux-based
Architecture	Modular, scalable, multi-site
Security	Data protection, compliance cybersecurity
Communication, connectivity	Modbus TCP, API, RS485 3rd party EMS, optimizers, market signals
Control & functions	System supervision, real-time monitoring FTM/BTM applications Grid connection