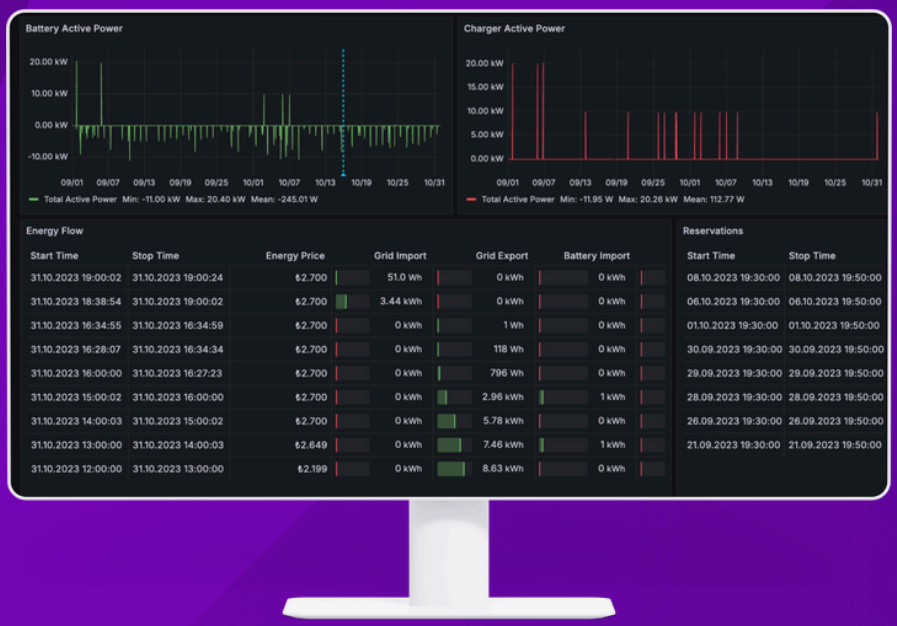
PowerKonnekt

PowerKonnekt in EV Charge Solutions



www.powerkonnekt.com

EV Charging

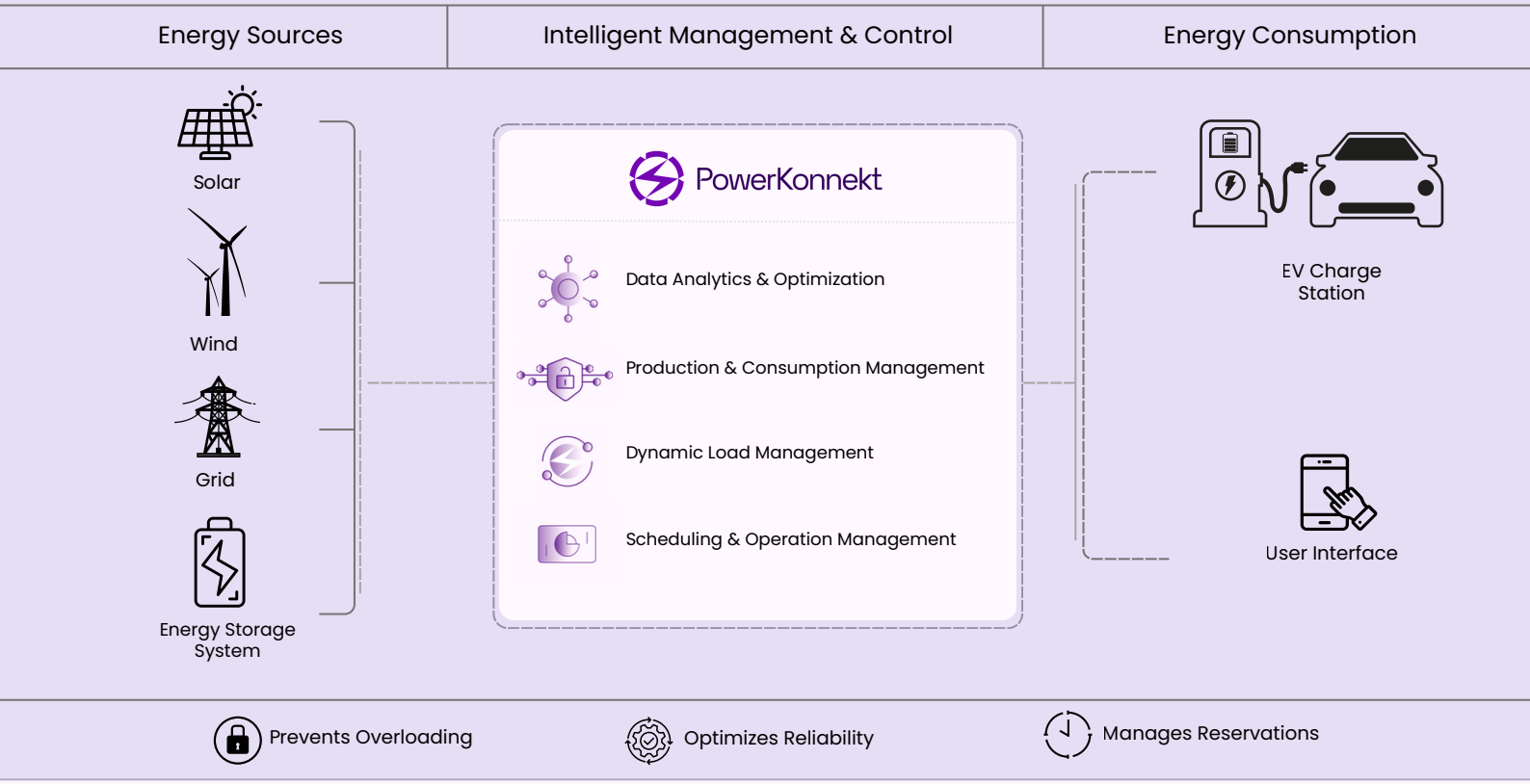
"**EV Charging** refers to the complete ecosystem that enables electric vehicles to be charged safely, efficiently, and in full coordination with the power grid."

System Integration
PowerKonnekt seamlessly integrates charging systems for optimal energy flow management

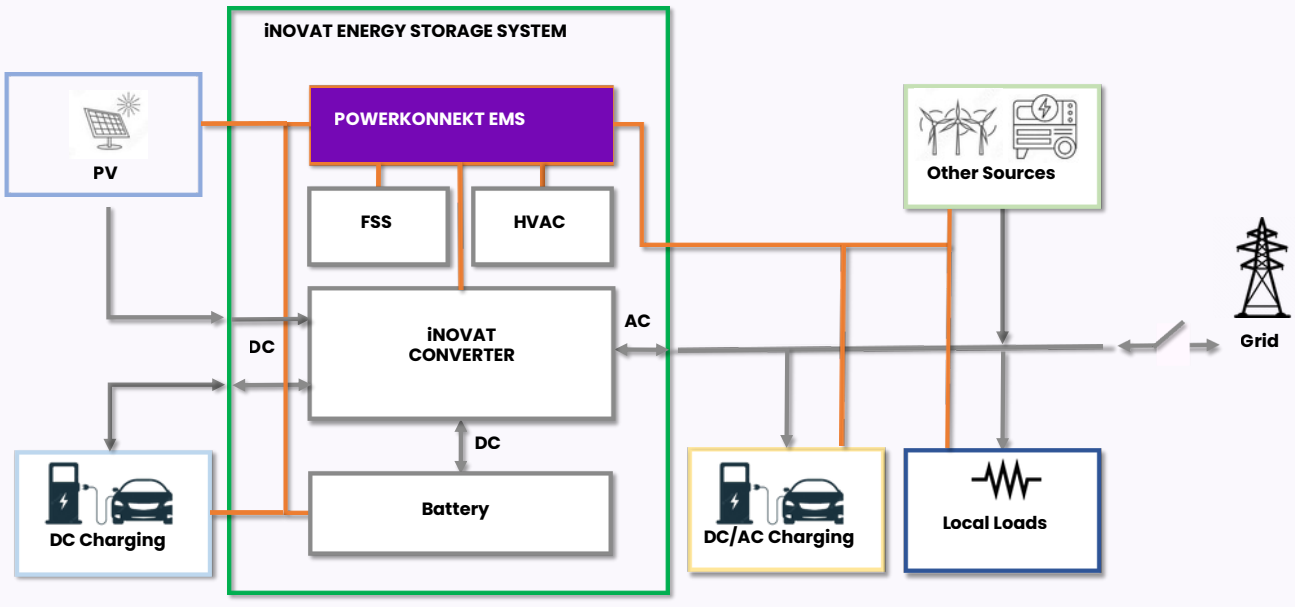
Smart Charge Management
PowerKonnekt ensures efficient load management and real-time charge optimization.

Grid & Energy Integration
Grid stability by integrating energy storage and charging infrastructure.

System Architecture



System Architecture with iNOVAT ESS



PowerKonnekt Offers

EV Charge

1.Smart Load Balancing: Optimizes power distribution across chargers to prevent overloads and reduce peak demand.

2. Energy Source Optimization: Selects the most efficient source (solar, wind, grid, storage) based on real-time availability and cost.

3. Tariff & Cost Management: Aligns charging with low-tariff periods and minimizes operational expenses.

4. Real-Time Monitoring & Control: Provides live charger status, power flow insights, and remote control capabilities.

5. Reservation App Integration: Pulls booking data into EMS for seamless scheduling and session coordination.

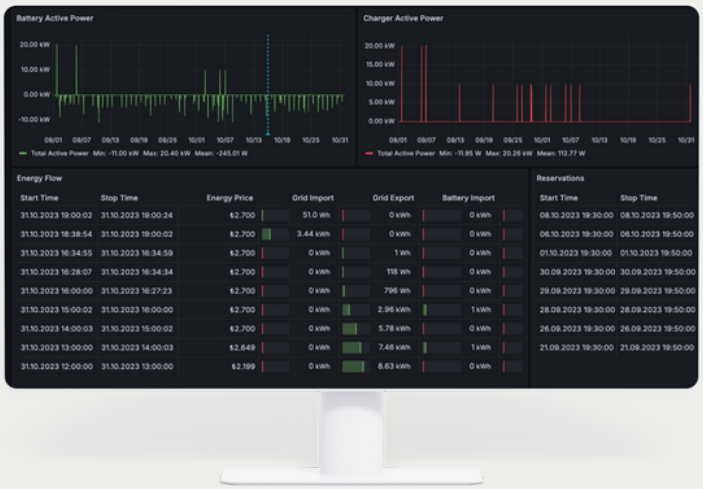
6.Grid Compliance: Ensures charging operations follow local grid codes and zero-injection rules.

7.Energy Storage Coordination: Uses batteries to smooth demand, reduce grid reliance, and boost renewable usage.

8.Analytics & Reporting: Delivers insights on energy usage, costs, and charger performance.

CASE STUDY

Project: Charge Station Solution
Location: Başkent OSB, Ankara, Türkiye



Key Capabilities Demonstrated

PowerKonnekt enables:

- Integration with the EV operator's reservation system
- Demand-aligned energy planning, matching PV production with charging demand
- Import control based on real-time conditions
- Off-grid operational capability
- Operational coordination for solar-first usage

Outcome

- Clear visibility of charging reservations
- Real-time view of site energy flows
- Controlled use of grid import
- Stable off-grid operation when required
- Optimized use of on-site solar generation
- Centralized monitoring of EV, PV, and factory load behavior