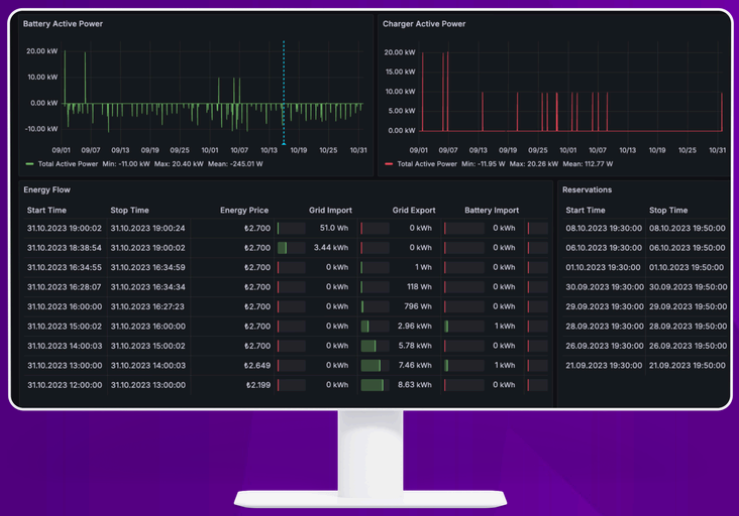
PowerKonnekt

Cybersecurity



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Cybersecurity

"Cybersecurity refers to the protection of energy management systems, communication channels, and control actions against unauthorized access, misuse, and operational risks in industrial environments."

Secure Access & Authorization
PowerKonnekt ensures role-based access control and authorized user actions for secure system operation.

Protected Command & Communication
Validates control commands and manages monitored communication with field devices for safer operation.

Traceability & Operational Resilience
Provides event logging, auditability, and secure system behavior during network or communication disruptions.

PowerKonnekt Offers

Microgrid

1. **Role-Based Access Control:** Restricts system access based on user roles and operational responsibilities.
2. **Secure Command Validation:** Ensures that all control actions are checked, authorized, and safely executed.
3. **Controlled Industrial Communication:** Manages communication with field devices through monitored and structured industrial interfaces.
4. **Authentication & Authorization Management:** Applies user verification and permission control across system layers.
5. **Secure Operation During Disruptions:** Maintains controlled and reliable behavior during network or communication failures.
6. **Event Logging & Auditability:** Records system actions and events for full traceability and audit readiness.
7. **Operational Integrity Protection:** Reduces the risk of misuse, misconfiguration, and unsafe control behavior.
8. **Resilient System Architecture:** Supports secure and stable operation across both Edge and Cloud environments.

Hardware Precision, Software Intelligence...

CASE STUDY

Project: Göktepe BESS
Size: Total 132 MWh
Location: Yalova, Türkiye

Key Capabilities Demonstrated

- Secure EMS integration with PPC, BESS, and renewable assets
- Authorized control of black start, FCR, and plant functions
- Real-time monitoring and traceable command execution
- Secure EMS logic aligned with site and grid requirements

Outcome

PowerKonnekt enables:

- Secure coordination between storage and renewable generation
- Lower risk of unsafe or unauthorized control actions
- Better visibility and traceability across operations
- Stronger plant resilience through secure EMS architecture

CASE STUDY

Project: Romania Gorj ESS
Size: Total 13,76 MWh
Location: Gorj, Romania

Key Capabilities Demonstrated

- Secure EMS integration across the AC-side architecture
- Controlled dispatch of storage and renewable assets
- Reliable plant operation through validated EMS logic
- Traceable and secure hybrid plant management

Outcome

PowerKonnekt enables:

- Secure renewable + storage hybrid operation
- Reduced operational risk and stronger system integrity
- Better traceability of control actions and events
- A scalable, cybersecurity-ready control structure

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