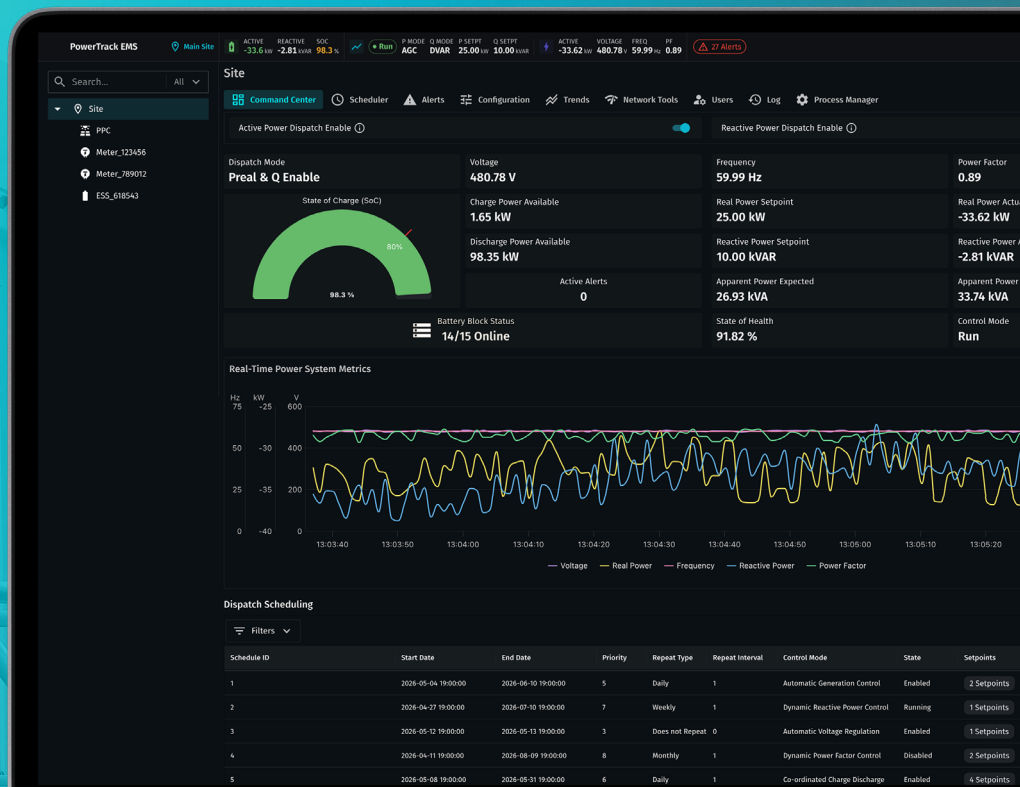




# PowerTrack™ EMS Solution

Get your assets online faster. Ensure compliance. Maximize revenue.

- Fast deployment - Reduce commissioning time by 32%
- Maximum uptime - 99.99% controller reliability keeps you earning
- Resilient by design - Hot-standby EMS/PPC redundancy with automatic failover protects revenue 24/7
- Full control - Advanced control modes for grid services and revenue optimization
- Future-ready - Add storage to existing solar with minimal to no hardware changes
- Cybersecurity-first - SOC2 Type II / NIST 800-53 audited and NIS2-compliant



# Complete Control from Site to Cloud

PowerTrack Energy Management System (EMS) connects your on-site equipment with cloud intelligence. Monitor and control your entire portfolio from anywhere, with real-time data and instant command response.

## What you get:

- Real-time monitoring and control
- Industry-standard protocols (DNP3, Modbus, OPC-UA, IEC 61850, IEC 60870)
- Transparent software - no vendor lock-in
- Proven hardware including Advantech and SEL

## Maximize Your Revenue Throughout the Project Lifecycle

### Development



#### Fast Deployment

Cut commissioning time through automated tuning and remote setup. Get to revenue faster with standardized integration.



#### Smart Integration

Work with most major battery or PCS supplier. Choose the best equipment without software restrictions.

### Operation



#### Multiple Revenue Streams

Earn from frequency response, voltage support, and energy trading simultaneously. Our advanced controls handle the complexity. standardized integration.



#### Reliable Performance

99.99% uptime through hot-standby EMS/PPC redundancy and automatic failover ensures revenue protection

### Expansion



#### Easy Hybridization

Add storage to existing solar sites with minimal to no hardware changes. Maximize your existing investments.



#### Portfolio Growth

Scale from single sites to entire portfolios with unified management and full visibility.

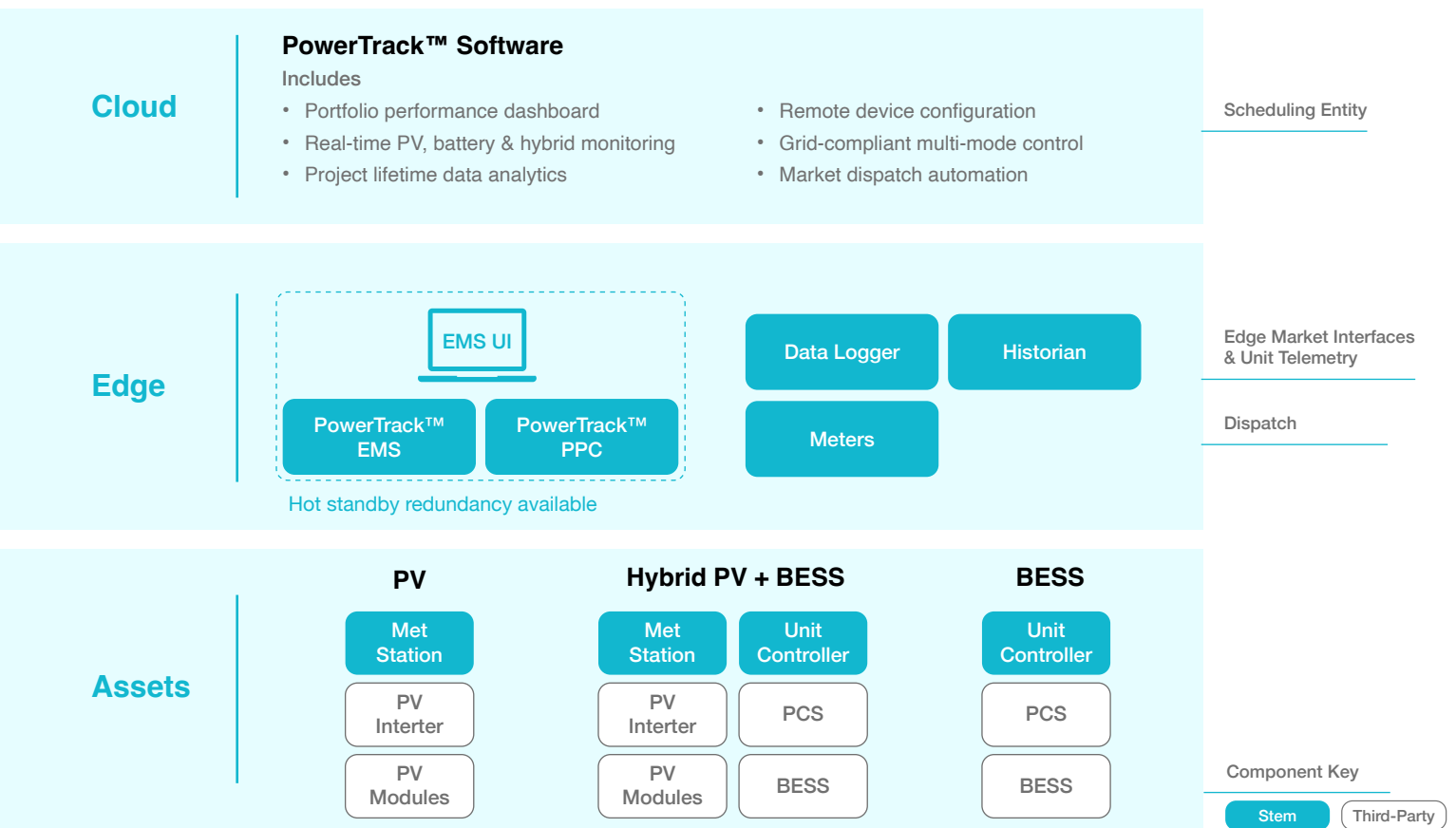


# Technical Architecture

PowerTrack EMS delivers complete asset control by combining proven on-site hardware with intelligent cloud software. The system starts with our unified computing platform that integrates PowerTrack EMS and PPC functionality, along with data logging and communication interfaces for comprehensive monitoring.

This foundation connects to our cloud platform, where PowerTrack Software enables portfolio management, real-time analytics, and remote configuration across your entire fleet. Built on industry-standard protocols and designed to work with any major equipment supplier, the architecture scales seamlessly from individual assets to enterprise portfolios while maintaining built-in redundancy for maximum reliability.

Cybersecurity is built into every deployment: the platform meets NIS2 requirements for critical infrastructure and is SOC2 Type II audited against NIST 800-53 controls. VDE-certified PPC is compliant with NC RfG (EU 2016/631) — including Poland’s national grid code — and proven integration architecture ensure compliance with global grid code requirements



## Acronyms

**BESS:** Battery Energy Storage System **EMS:** Energy Management System **PCS:** Power Conversion System  
**PPC:** Power Plant Controller **UI:** User Interface

## Hybrid Projects Made Simple

PowerTrack EMS makes hybridization easy:



### Future Hybrid Capability

Install solar with EMS that enables seamless transition to hybrid operations when storage is added



### Solar-to-Hybrid Transformation

Convert existing solar installations to integrated hybrid systems leveraging current infrastructure and Stem’s EMS solution



### Complete Hybrid Control

Deploy new hybrid sites with unified controls, delivering maximum performance from day one

## Why Stem

Stem remains the leader in the management of solar, hybrid, and storage assets and portfolios. Together with our customers, we are leading the clean energy transition towards a more resilient energy future.

### Industry Expertise

Managing 37+ GW of solar and nearly 2 GWh of storage assets with deep understanding of complex hybrid energy systems across diverse markets.

### Innovative Technology

State-of-the-art control systems and analytics providing real-time visibility and command precision with industry-leading uptime.

### Dedicated Support

Expert team delivering specialized assistance in utility-scale operations, grid integration, and regulatory compliance.

## About Stem, Inc.

# Stem is a global leader reimagining technology to support the energy transition.

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Turning complexity into clarity, and potential into performance. We help asset owners, operators and stakeholders benefit from the full value of their energy portfolio by enabling the intelligent development, deployment, and operation of clean energy assets. Our integrated software suite, PowerTrack, is the industry standard and best-in-class for asset monitoring, supported by professional and managed services, under one roof. Meant to tackle challenges as seamlessly as possible, Stem shows the information needed clearly and accurately and helps harness raw data to inform actionable insight. With global projects managed in 55 countries – from Germany to Japan and across North America – customers have relied on Stem for nearly 20 years to maximize the value of their clean energy projects.

Driven by human and artificial intelligence – Stem is unlocking energy intelligence. Learn more at [stem.com](https://stem.com).

### To book a meeting, contact:

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