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OVERVIEW

# 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 suppliers. 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.

**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.

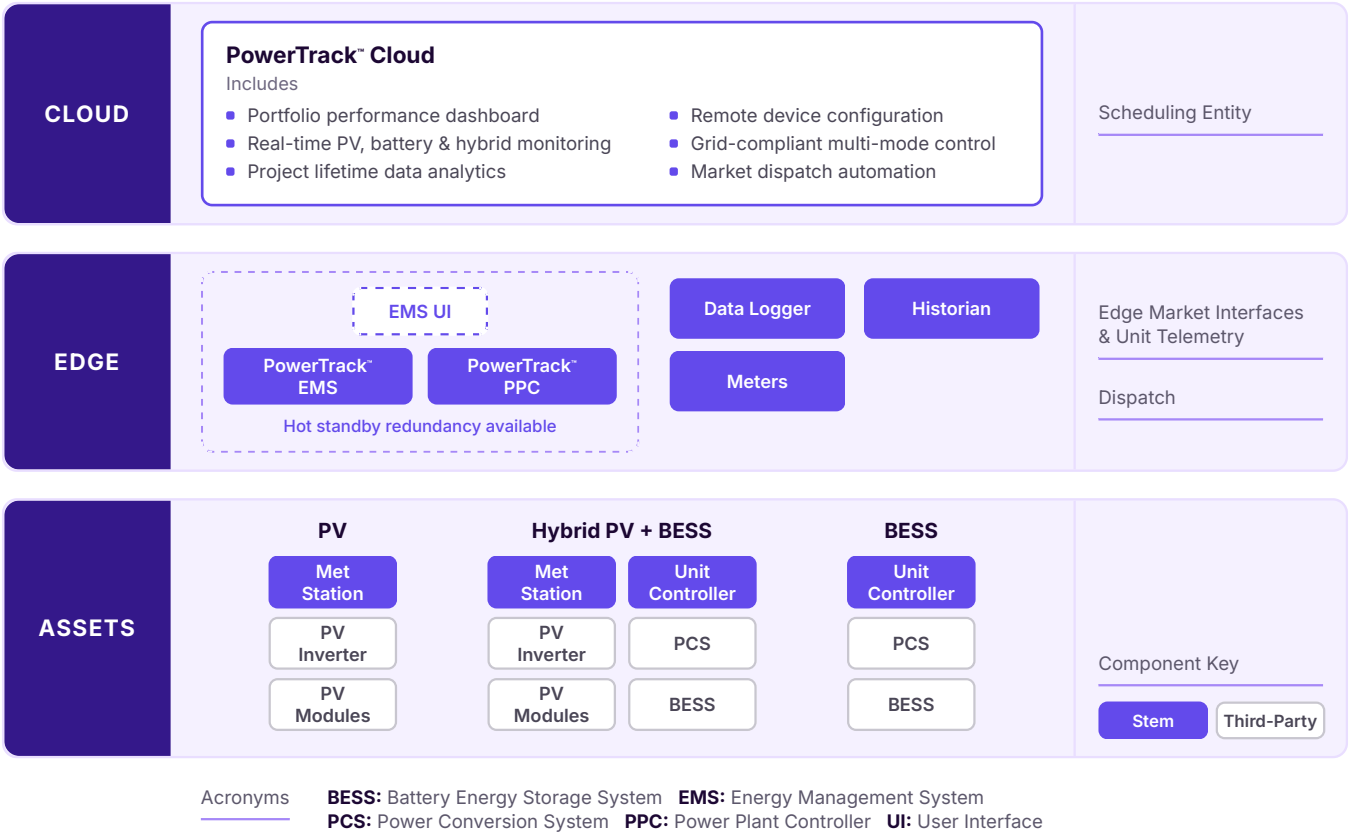


# Technical Architecture

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 Cloud 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 an 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 37.5+ 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 (NYSE: STEM) is the operating system for clean energy: where assets connect, sites are optimized, and value is captured.

Stem is a global leader in energy intelligence and the operating system for clean energy: where assets connect, sites are optimized, and value is captured. Powered by decades of operational experience and purpose-built AI, our PowerTrack™ platform is the layer that sits between raw data and confident action, making every decision-maker smarter, every asset more productive, and every transition more certain.

From asset monitoring to portfolio optimization and control, PowerTrack delivers everything energy professionals need in one place. With projects managed across 55 countries, we have spent nearly 20 years empowering asset owners, operators, and developers to take command of what comes next, with the certainty to act, the trust to commit, and the intelligence to lead.

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The Operating System for Clean Energy.