Grid Compliance System

Design, Monitoring & Reporting

Maximize yields and meet TSO stability & power quality requirements at POI with ETAP Grid Compliance solution, including model-driven eSCADA platform, ePPC™ Power Plant Controller, and eTESLA™ Dynamic System Monitoring Recorder.

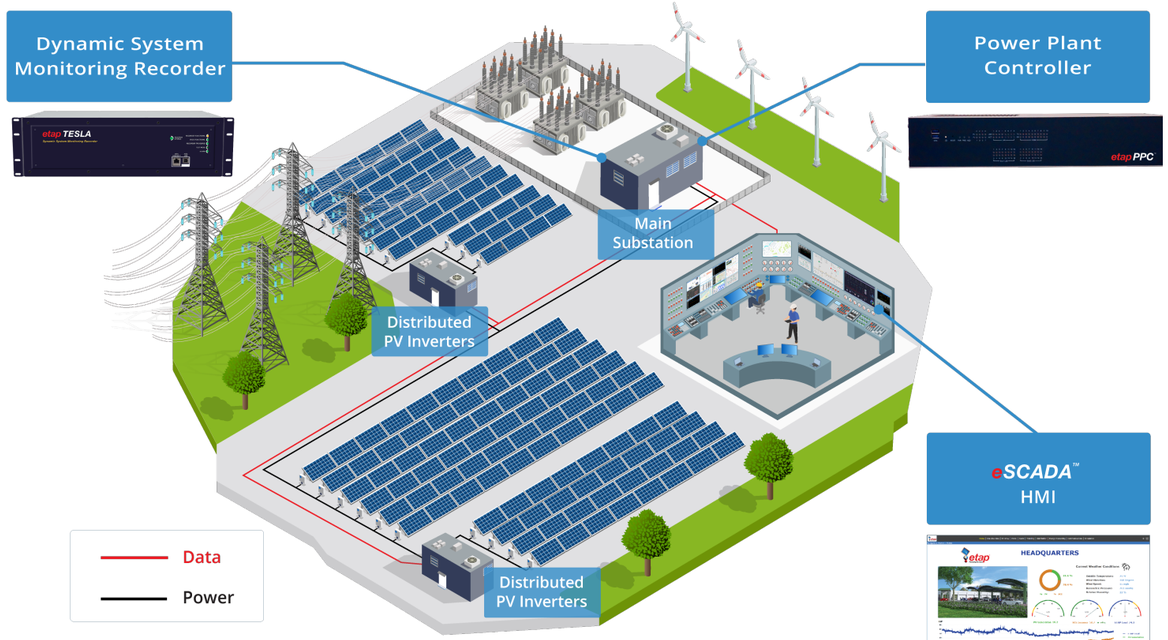
- ✓ Ensure resiliency & reliability of power supply
- ✓ Conform to grid requirements
- ✓ Reduce risk throughout planning and operations
- ✓ Full dynamic control for enhanced stability
- ✓ Power conditioning & improved power quality
- ✓ Enhance reliability by utilizing dynamic models
- ✓ Meet investor expectations of energy yield
- ✓ Accurate forecast of yield & transfer capability
- ✓ Operation, maintenance & compliance auditing
- ✓ Greater transparency & investment security

Intelligent Design & Engineering

Perform automated steady-state and transient studies, design and simulate power plant controller logic to simulate optimal grid performance under all possible situations.

Performance Testing & Validation

Test and validate power plant controller logic with ETAP SIL technology to ensure smooth commissioning and approval procedure when connecting to the grid. Reduce downtime via direct deployment or hot-swap of logic to Power Plant Controller.

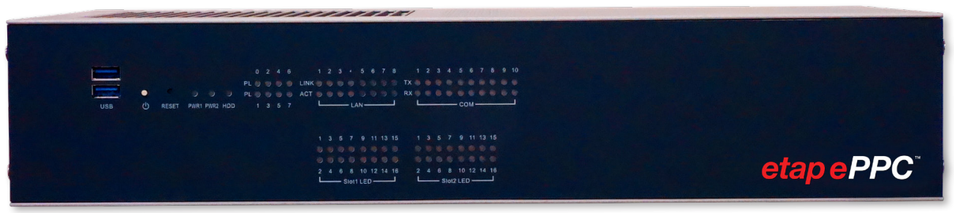


ePPC™ Power Plant Controller

Intelligent and secure controller hardware ensures compliance with local grid code and standards. ePPC leverages a model-driven electrical digital twin for visualization, predictive calculations, optimization and management of renewable power plants.

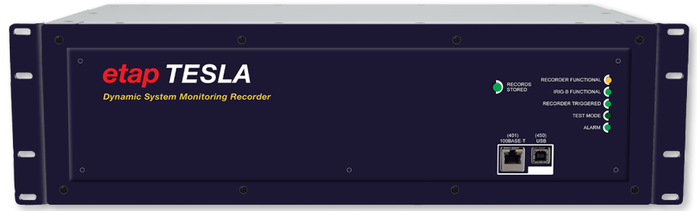
Integrated Plant Controller & SCADA

Monitor and gain insight into asset health and perform preventive maintenance based on present and anticipated conditions by combining PPC and SCADA with dedicated HMIs and predictive analysis applications.



eTESLA™ Dynamic System Monitoring Recorder

Continuous monitoring of steady-state and dynamic plant response to tune the electrical model, identify generator / AVR / governor and control parameters, and confirm PPC response under actual operating conditions.

Grid Compliance Monitoring & Reporting

TESLA hardware and software solution performs assessment and continuous audit of actual operation versus expected response. System operating condition is compared with established grid code rules for compliance reporting and evaluation.