GE VERNOVA

EnergyAPM

Asset Performance Management Software for T&D Assets

EnergyAPM is GE Vernova's data analytics software platform designed by industry experts for power transmission and distribution assets. It combines online and offline data with industry leading analysis tools, analytics and strategy modules, providing a reliable intelligent asset performance management strategy solution for power delivery assets.

- Reduce Costs
- Improve Availability & Reliability
- Manage Risk
- Extend Asset Life
- Increase Health & Safety

SHORT-TERM ASSET MAINTENANCE | **MID-TERM ASSET PLANNING** | **LONG-TERM ASSET HEALTH**

Building Your EnergyAPM

Choose from A Suite of Independent Microservices & Microapplications

Health
Optimize asset life and value

- Single asset health
- Fleet health
- Zonal health
- Grouped asset type health
- Network health

Reliability
Based on assets' failure modes

- Detects impending failures
- Provides warnings & Urgency
- Reliability analysis
- Asset criticality management

Strategy
Focus on target outcomes

- Lifecycle cost analysis
- O&M planning
- Simulate, optimize & compare project costs & risk
- Return on investment analysis

Work
Prevent failures & optimize field work

- Recommendations
- Work orders & requests
- EnergyFIT BackOffice
- EnergyFIT mobile application for data collection

Lab
Advanced diagnostics and prognostics engines

- Asset diagnostics
- Dynamic loading
- Digital twin
- Predict failure & end of life

100+ asset models (FMEA, Health, Recommendations, Maintenance Plan)

Core Functionality

Data Processing
- Data integration & storage
- Online monitor integration
- Data classification, preparation, persistency
- Big data processing

Cyber Security
- Logging
- Access control (ABAC, RBAC)
- Secure data at rest & in transit

Alerts
- Critical events
- Alarms and alerts
- Offline alarm

Inventory
- Installed base
- Spares quantity (EnergyFIT)
- Spares cost

Delivering Reliable Asset Insight

EnergyAPM provides reliable diagnostics, data visualization and health assessment in a single environment. Covering the critical power delivery assets such as transformers, circuit breakers, GIS, surge arresters, power lines, capacitor banks, and more. The analytics available are model and manufacturer agnostic and are developed in line with industry guides such as IEEE, IEC and GE Vernova expertise as well as industry papers from CIGRE. The solution is continually updated with the latest asset models and features as data analysis techniques and available information evolve.

Asset Investment Planning

Prioritizing Maintenance and Replacement

- Simulate strategy scenarios with financial outcomes
- Optimize OPEX & CAPEX spend
- Minimize total fleet risk
- Methodology to compare replacement projects
- Health & risk based analysis approach of individual or groups of equipment
- Consideration on criticality of each asset and action
- Prioritization of replacement and maintenance jobs

Monitored Online Data

Up-to-Date Asset Data & Information

- Native connection to GE Vernova asset monitors
- Seamless 3rd party monitor support, protocol agnostic
- Other digital inputs providing near real-time data, event information and alerts

Gathered Offline Data

Data Asset Data & Information

- Offline & lab tests
- Exchange data with historians, SCADA and data lakes
- Utilise GE Vernova Mobility (EnergyFIT) for rapid field inspection information and optimized back office processing time of field inspection information

Data Analysis & Analytics

Providing Advanced Diagnostics and Prognostics

- Library of industry standard diagnostics and prognostics tools
- Advanced data analytics
- Industry guideline & GE Vernova proprietary models
- Data science workbench
- Custom in-depth analysis
- Asset & fleet dashboards

For more information, visit
gevernova.com/grid-solutions

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