

Smarter Plants, Optimizing Future Energy

Powered by **SHARAJMAN Technologies**



GenSOM Solar is a centralized, web- and mobile-based real-time system designed specifically for power generation companies—including solar, wind. It streamlines operations by enabling efficient monitoring of generation and performance, maintenance planning, and comprehensive plant and asset management.

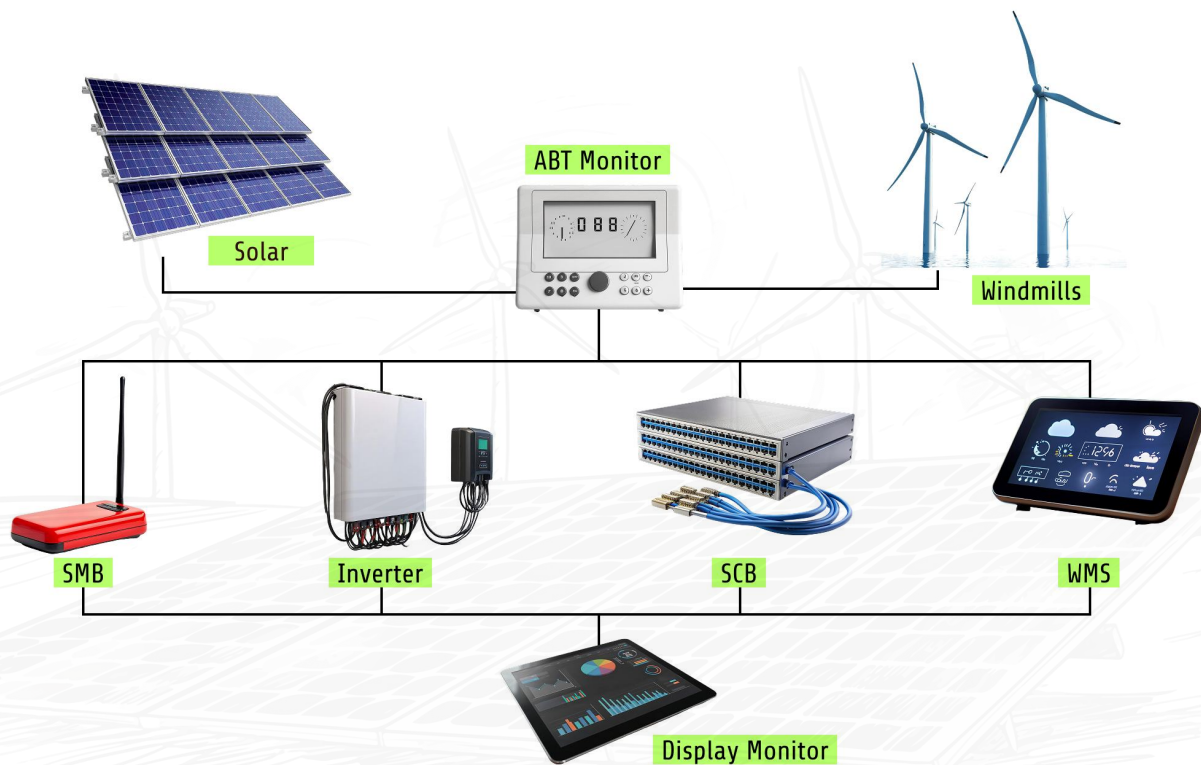
With real-time dashboards, intelligent automation, and seamless SCADA integration, GenSOM Solar enhances operational efficiency, reduces costs, and ensures regulatory compliance—at scale.

Feature Highlights

- ✓ **Fragmented maintenance & inventory systems**
 - Visualize generation, inverter health, and site KPIs
 - Component-level performance
 - Actual vs. expected generation with deviation metrics
- ✓ **Data Ingestion & Integration**
 - SCADA data Integration
 - Integrates and supports OPC (DA /UA), APIs, FTP
 - Data Acquisition from Multiple Data Loggers
- ✓ **CMMS Dashboard**
 - Plan preventive & corrective maintenance
 - Schedule tasks, track progress, and maintain logs
 - Minimize downtime through proactive alerts
- ✓ **Inventory Management**
 - Track stock levels across locations
 - Automate reorder levels and procurement
 - Monitor consumption trends for spare parts
- ✓ **Smart Alerts & Notifications**
 - Configurable alert system for threshold breaches
 - Get notified instantly via mobile, email, or SMS
 - Faster decision-making reduces downtime
- ✓ **Reports & Compliance**
 - Business logic aligned with regulatory requirements
 - Comprehensive dynamic reports covering all operational data
 - Detailed audit logs ensure transparency and accountability



Data Flow Overview



Challenges Solved

For other renewable energy(wind, hybrid)

Weather Forecast Integration

DSM Charge Calculations:Daily, Weekly, Monthly

Automated DSM &Regulatory Reporting

Mobile App Enhancements with offline capabilities

AI-Powered Predictive Analytics for maintenance and performance

Key Stats at a Glance

80+ Renewable Energy Sites
integrated using GenSOM Solar

Data Sources
SCADA, OPC, APIs, FTP

Data Interval Support
From **20ms to 5 minutes**

Maintenance & Inventory
for 1000s of assets

Real-Time Dashboards
with component-level drill-down

Live Alerts
via App, SMS, and Email

Future Scope

For other renewable energy
(wind, hybrid)

Weather Forecast Integration

DSM Charge Calculations
Daily, Weekly, Monthly

Mobile App Enhancements
with offline capabilities

AI-Powered Predictive Analytics for
maintenance and performance