REVOLUTIONIZING **MONITORING** AND MANAGEMENT OF **PHOTOVOLTAIC** INSTALLATIONS

s❋lareye platform

SolarEye Platform launches a new era in the PV Industry, being the first and only software platform with built-in Artificial Intelligence for...

- Fastest fault isolation
- PV plant yield maximization
- Increase of return on investment

FASTEST FAULT ISOLATION

STATE OF THE ART TECHNOLOGY
Estimation of the expected performance for each plant and comparison with the actual one

REAL-TIME MONITORING WITH IN-DEPTH ANALYSIS
Real-time monitoring and analysis of PV data from multiple plants

ACCESSIBLE ANYTIME, ANYWHERE
Powerful diagnostic tools, alerts and notifications at the tip of your fingers

NEURON ENERGY
SOLUTIONS

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BEYOND MONITORING...

Photovoltaic installations are assets that create value for their owners. Therefore plant owners should strive to get the most out of it and maximize ROI.

PV professionals responsible for the operation and maintenance of PV installations need IT solutions that maximize the yield of the installations, increase customer satisfaction and reduce the costs associated with monitoring, management and fault recovery.

Traditional monitoring and management systems of photovoltaic installations are limited to the presentation of data collected at the plant.

The SolarEye Platform is an intelligent system that acts as a virtual energy assistant, proactively monitoring and automatically detecting potential faults in your PV plants with high accuracy, creating a synergy between the plant owner and the PV professional, towards increased efficiency, reliability and higher returns.

CREATING VALUE

INTELLIGENT ANALYTICS

It is the only system with built-in intelligence, based on state of the art technologies, capable of estimating, fast and accurately, each plant's expected production under certain climate conditions.

EARLY DETECTION

Automatically determining deviations from the expected production, with high accuracy, the SolarEye Platform detects potential DC disturbances, facilitating maximization of the plant's yield and increase of the ROI.

MINIMIZING FAULT RECOVERY RESPONSE TIMES

Faults at the AC side including fuses and other overcurrent protection devices can be spotted instantly in a graphical diagram depicting the plant's structure. Hence, SolarEye saves time on fault analysis at the office and fault recovery in the field, resulting in cost savings from better scheduling of repairs and reduction of unnecessary visits.

QUANTIFICATION OF POWER LOSS

Power loss from either AC Faults or DC disturbances is quantified with high accuracy, providing valuable information that could be used for statistical analysis and insurance claims.

DECISION SUPPORT

Information that otherwise you could not even imagine is revealed. Potential fault conditions are discovered. Knowledge is created regarding what each part of the installation is capable of producing, at a fine grained level, under each plant's specific microclimate.
Having this wealth of knowledge allows you to make informed decisions about necessary corrective actions with respect to unexpected production decrease or failures.
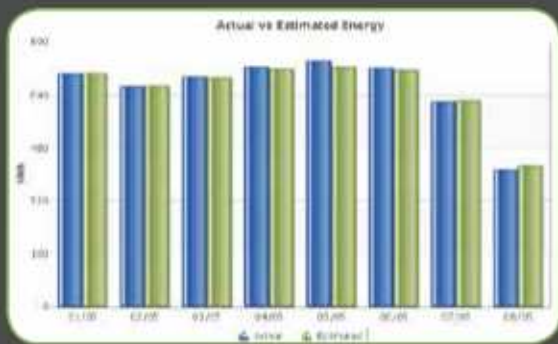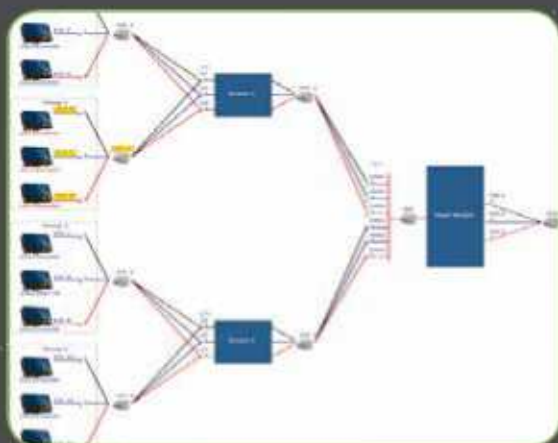
Presentation of actual energy produced vs. estimated energy
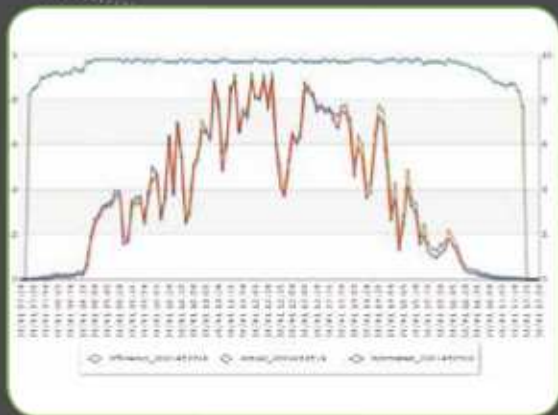
Inverter performance

Plant AC diagram spotting potential faulty overcurrent protection devices after detection of failures in inverters

PERFORMANCE ESTIMATION

Real-time analysis and comparison between the energy produced by the plant and the estimation of the energy that should have been produced based on intelligent dynamically produced models. Deviations in performance are calculated with high accuracy (up to 2%) facilitating the detection of potential disturbances in the installation.

RICH DIAGNOSTIC TOOLS

Innovative diagnostic tools enable the fastest fault isolation through rich interfaces based on Web 2.0 technologies. Automatic generation of the installation's connection AC diagram and spotting of potential faults. Isolation of the specific inverter where the disturbance occurs, showing graphically the period where production is less than expected and the corresponding loss.

MONITORING & MANAGEMENT

Monitoring and management of all your plants simultaneously adopting the concept of a photovoltaic operating center (POC). Fault tracking made easy through a rich dashboard interface. Counterpart map interface to find the exact locations and schedule visits. Multiple performance indicators and statistics provide an in depth view of the installation.

Integrated log book with detected faults is coupled with corrective and preventive maintenance tasks, a ticket management system along with their cost analysis.

POWERFUL DATA PRESENTATION

Configuration and management through a rich set ofdata analysis and presentation tools. Standard andcustom defined diagrams providing all the requiredinformation.

DYNAMIC ALERTING & REPORTING

Alerts are sent through email and SMS in caseof major failures and erratic operation. Usefulinformation regarding the plants' operational statusand performance is also sent.
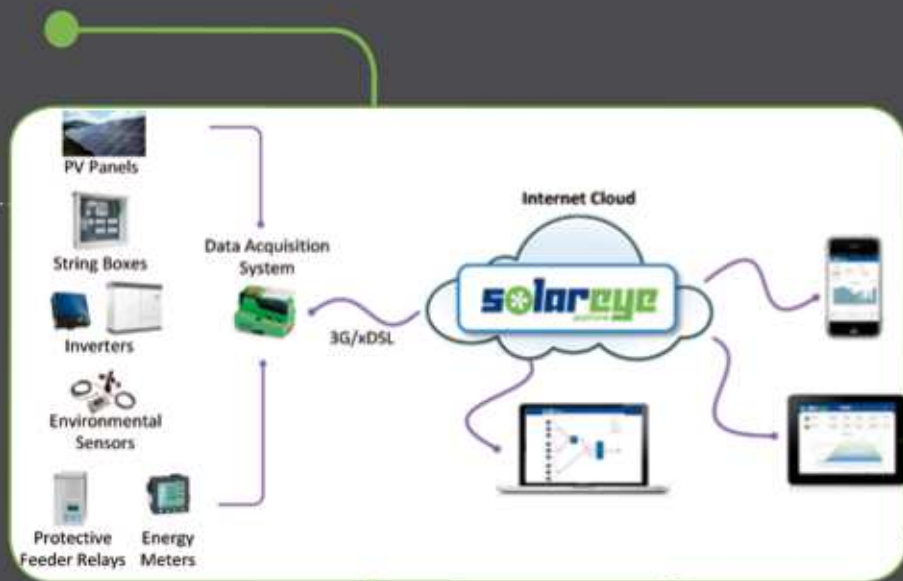
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PRODUCT INSIGHTS

COMPATIBILITY

SolarEye Platform is a vendor independent platform, compatible with several data loggers, ensuring interoperability with most inverter manufacturers, potentially without adding any further equipment costs .

EASE OF USE

SolarEye is a Web 2.0 Cloud computing application that makes monitoring your plants very easy. It is accessible directly over the web through standard desktops, smart phones and tablet devices.

PV Panels
String Boxes
Inverters
Environmental Sensors
Protective Feeder Relays
Energy Meters
Data Acquisition System
3G/xDSL
Internet Cloud
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