



ALL RENEWABLES IN ONE PLATFORM



CloudIndustries.eu all renewables in one platform solution

The CloudIndustries.eu platform allows to monitor energy production in real-time and automatically notifies operators and supervisors about unexpected events. It connects directly to renewable power plants controllers, inverters or data gateways and collects all possible data. CloudIndustries.eu enables integration with a wide range of industrial controllers, gateways, meters, sensors and I/O data sources.

- Energy data visualization
- Easy data aggregation
- Profit calculation
- Automated reporting
- Alarm management
- Personalized dashboard



What can be monitored?

The CloudIndustries.eu platform is designed to integrate data from different hardware systems (meters, sensors, controllers, etc.) and software formats, no matter what vendors you choose.

Data can be received automatically through protocols from controllers, meters, data loggers, SCADA systems, production systems. The platform can be used as an interface between all system manufacturers, making the integration much more efficient.

We already integrated the following devices:



List is constantly updated, so please contact us if you have other vendor's equipment.

How it works?

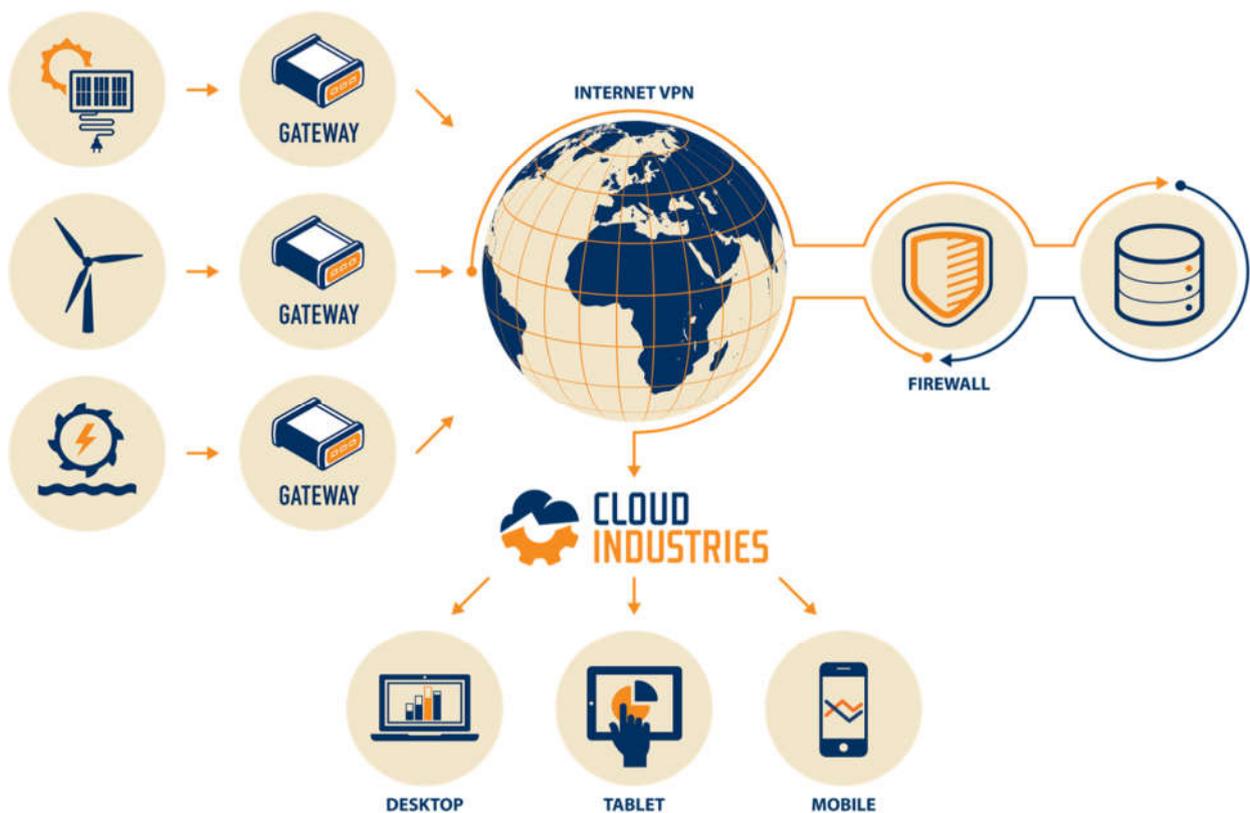
The architecture of CloudIndustries.eu is designed to work 24/7 by clustering and balancing the server instances where it will run, as well as support for high availability data base deployments.

Integration

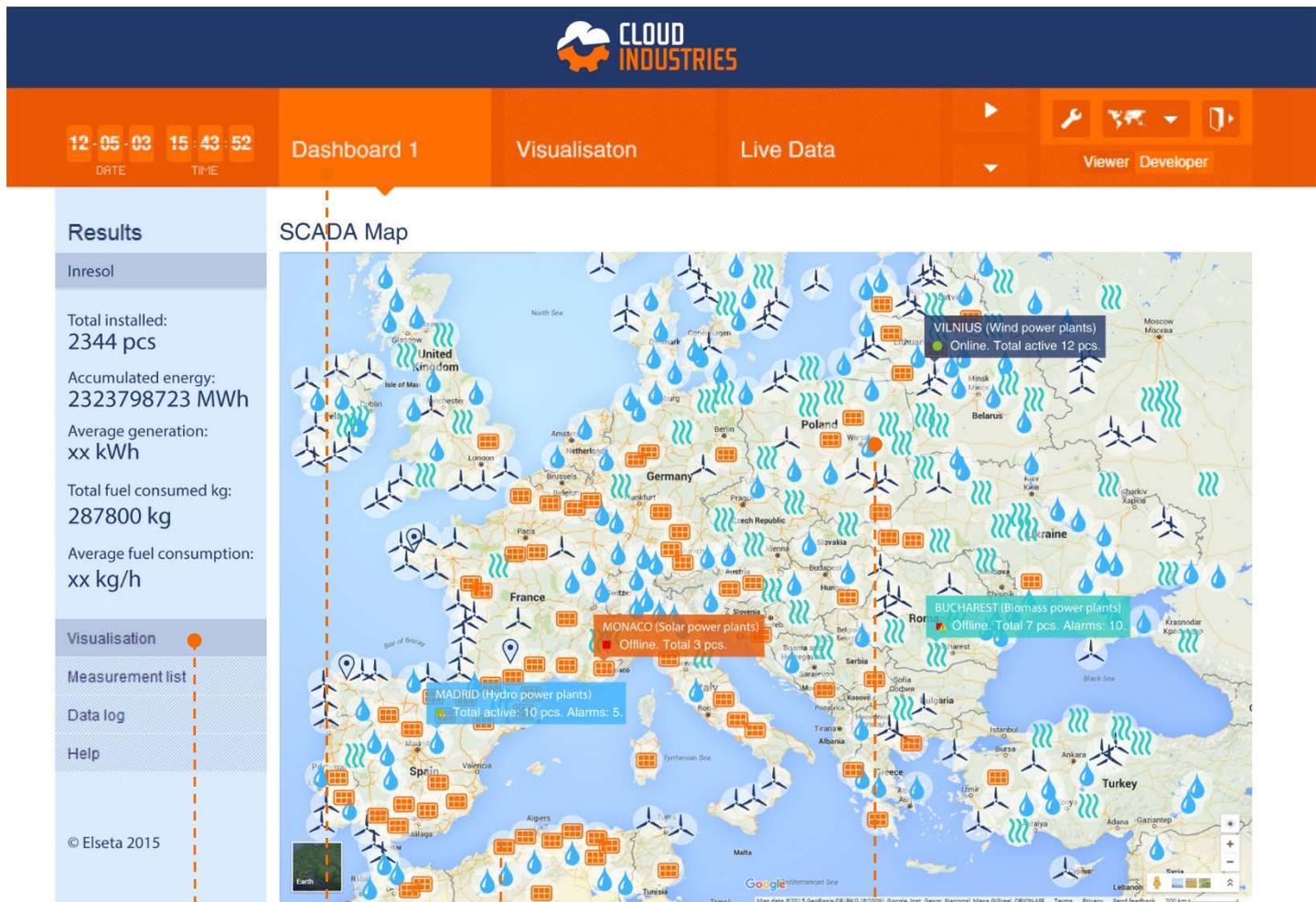
CloudIndustries.eu monitoring solutions can also be connected to third party or customer-owned software or services in order to develop complex monitoring and automation. Scalable for application of any size.

Our system architecture empowers our partners to design, build, deploy and maintain SCADA functionality in WEB-based applications. The data from controllers, meters, sensors and other equipment goes through gateways to our servers, and it is protected by VPN tunnel and firewalls.

As we get data into servers, we create a user-friendly, smooth and easy to understand user interface.



User interface ADMINISTRATOR



SCADA Map

Results

Inresol

Total installed:
2344 pcs

Accumulated energy:
2323798723 MWh

Average generation:
xx kWh

Total fuel consumed kg:
287800 kg

Average fuel consumption:
xx kg/h

Visualisation

Measurement list

Data log

Help

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Active icons

The icons on the map show names of sites and their status. If critical alarms appear, they change colour.

Easy navigation through sites

Navigation menu enables navigation through sites or geographical locations. This particular example shows navigation through different countries where you can see monitored renewable power plants.

Side menu shows overall values from all sites.

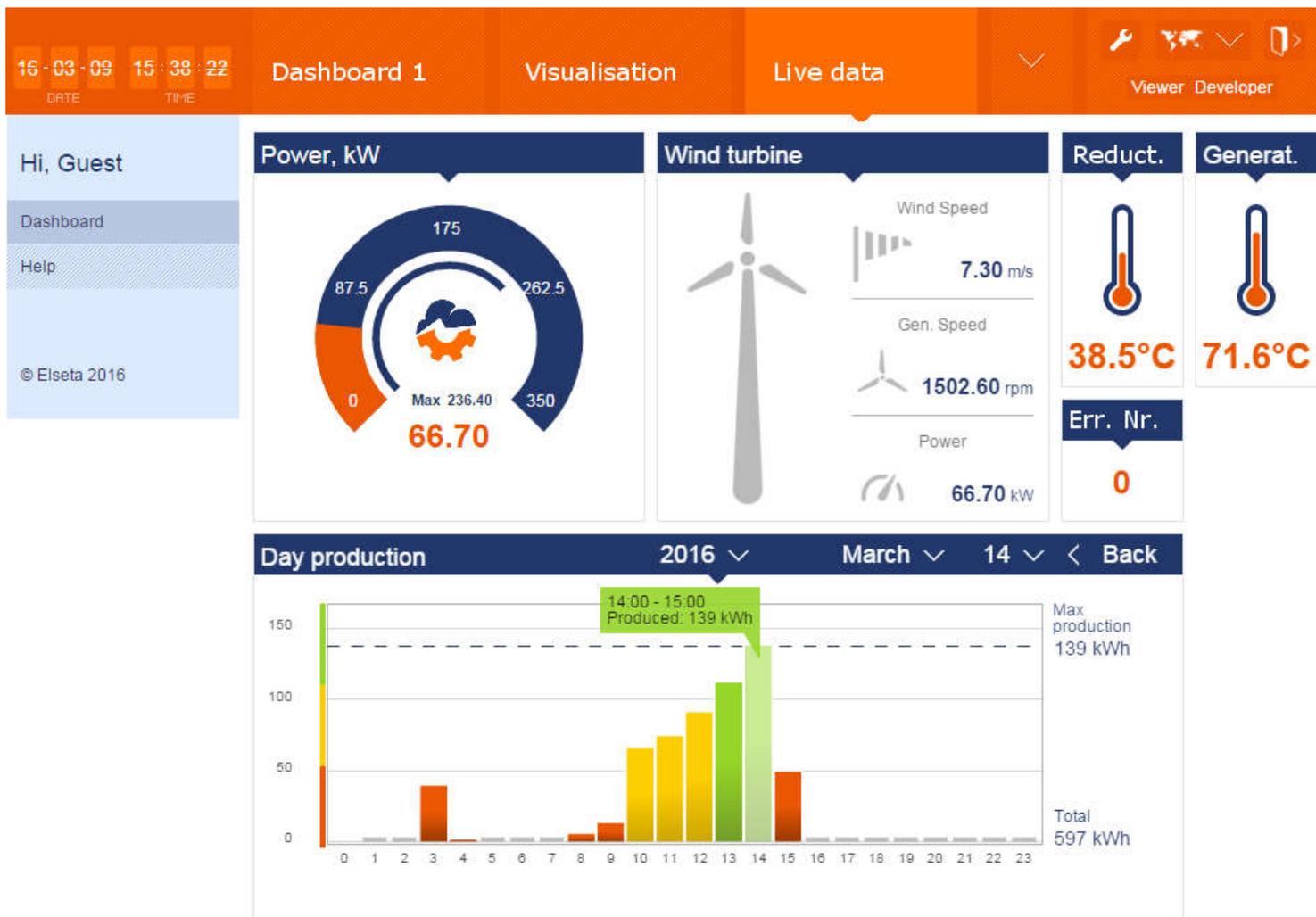
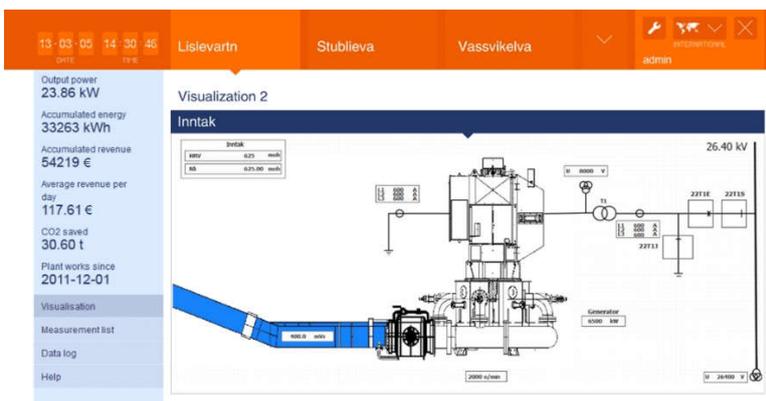
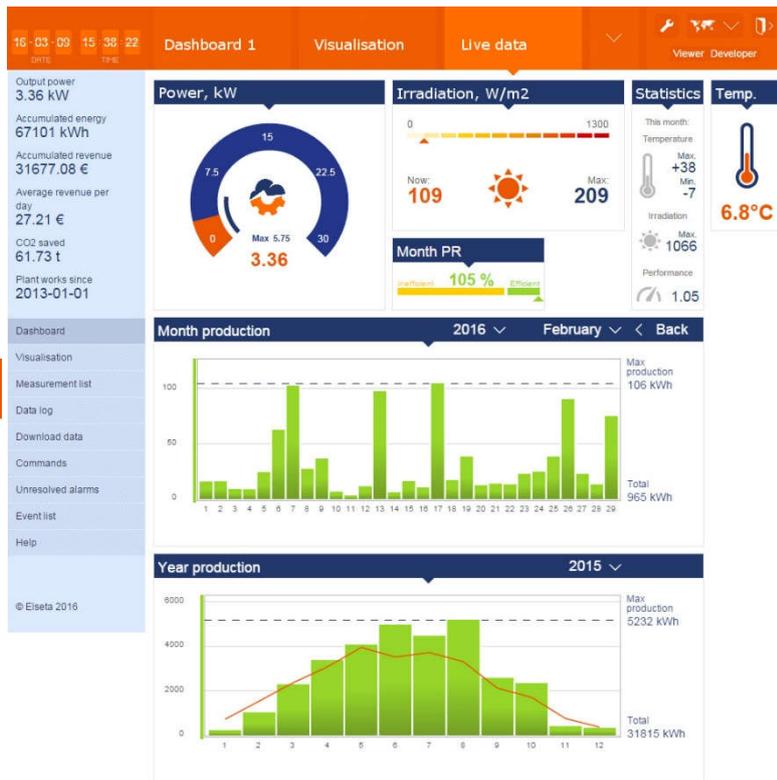
There is a possibility to put any kind of values of result which is important to the customer.

Map with sites location

Google maps-based functionality allows to easily zoom in and out of a location. Active icons show exact locations of projects.

Detailed view of each power plant performance

Administrator is allowed to go into each power plant statistics and see a detailed view of energy production. The dashboard contains such information as outside temperature, wind speed, sun activity, water flow speed, real time power generation, historical perspective of production, minimum and maximum values of temperature, etc. CloudIndustries.eu has a tool for dashboard customization.



Personalized view

User interface can be personalized by user needs – grouped by type, size, location. Calculations can be made by year, month, day, production ability, etc.

Results

CloudIndustries

Total installed: 2344 pcs

Accumulated energy: 2323798723 MWh

Average generation: xx kWh

Total fuel consumed kg: 287800 kg

Average fuel consumption: xx kg/h

Visualisation

Measurement list

Data log

Help

© Elseta 2015

Objects specific data

Regional performance overview

Status	City (Country)	Production	Production, kWh	kWh today	kWh yesterday	kWh this month	kWh last month	kWh this year
WIND POWER PLANTS								
■	Copenhagen (DEN)	63%	0.0	202	202	200	1182.3	2024.5
■	Vilnius (LIT)	79%	47.1	6259	6259	6257	4031.6	625559.7
■	Talin (EST)	62%	0.0	203	203	203	133.7	25403.6
■	Consenza (ITA)	92%	17.3	245	245	245	1963.7	24569.5
■	Bordeaux (FRA)	38%	22.7	189	189	188	119.0	1849.3
■	Gijon (ESP)	45%	0.0	483	483	182	303.5	4813.4
■	Porto (ESP)	61%	9.6	153	153	145	82.3	1153.5
■	Waterfold (IRL)	48%	28.3	535	535	525	1501.6	28357.9
■	Kristiansand (NOR)	86%	0.0	50	50	43	109.4	1793.9
SOLAR POWER PLANTS								
■	Melaga (ESP)	89%	202	1182.3	202	200	0.0	24569.5
■	Barcelona (ESP)	23%	6259	4031.6	6259	6257	47.1	1849.3
■	La Rochelle (FRA)	91%	203	133.7	203	203	0.0	25403.6
■	Frosinone (ITA)	50%	245	1963.7	245	245	17.3	1153.5
■	Lille (FRA)	92%	189	119.0	189	188	22.7	1849.3
■	Peterborough (GBR)	64%	483	303.5	483	182	0.0	4813.4
■	Graz (AUT)	39%	153	82.3	153	145	9.6	1153.5
■	El Hoceima (MAR)	93%	535	1501.6	535	525	28.3	28357.9
■	Cologne (GER)	57%	50	109.4	50	43	0.0	1793.9
HYDRO POWER PLANTS								
■	Madrid (ESP)	41%	1182.3	202	202	0.0	200	4813.4
■	Gibraltar	67%	4031.6	6259	6259	47.1	6257	1153.5
■	Carlow (IRL)	61%	133.7	203	203	0.0	203	28357.9
■	Kolding (DEN)	68%	1963.7	245	245	17.3	245	1793.9
■	Palanga (LIT)	93%	119.0	189	189	22.7	188	1849.3
■	Groningen (NED)	84%	303.5	483	483	0.0	182	4813.4
■	Barcelona (ESP)	49%	82.3	153	153	9.6	145	1153.5
■	La Rochelle (FRA)	83%	1501.6	535	535	28.3	525	28357.9
■	Graz (AUT)	65%	109.4	50	50	0.0	43	1793.9
BIOMASS POWER PLANTS								
■	Consenza (ITA)	90%	1182.3	202	202	200	0.0	625559.7
■	Waterfold (IRL)	50%	4031.6	6259	6259	6257	47.1	25403.6
■	Bordeaux (FRA)	67%	133.7	203	203	203	0.0	24569.5
■	Porto (ESP)	56%	1963.7	245	245	245	17.3	1849.3
■	Talin (EST)	73%	119.0	189	189	188	22.7	4813.4
■	Vilnius (LIT)	68%	303.5	483	483	182	0.0	4813.4
■	Barcelona (ESP)	95%	82.3	153	153	145	9.6	1153.5
■	Carlow (IRL)	24%	1501.6	535	535	525	28.3	28357.9
■	Cologne (GER)	49%	109.4	50	50	43	0.0	1793.9

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Showing from 1 to 14 of total 14 values

Overview of power plants

Dashboard shows you grouped power plants by type.

Each line gives you information about power plant current production and production of the day, month,



Data logging

Data logging is one of the most useful feature of CloudIndustries.eu. It allows you to compare measurements from different sources in timeline scaled from one second to years. Incredibly fast data delivery to your screen will not let you waste your time waiting for results.



Different data sources

User can choose different data sources to compare two and more power plants

Automatic scale

Automatic scale tool will be useful to fit different measurements to one diagram window

Different measurements

Long list of measurements can be selected to find your best compares

Event list

In order to maintain your power plant in best condition you must have all alarms in one place, check how frequent they appear, track time spent to solve problems, find out causes and nature of the incidents. CloudIndustries.eu will guarantee that all the alarms will reach you on time.

16:03:14 DATE 16:26:12 TIME

Dashboard 1
Visualisation
Live data
Viewer
Developer

Output power **2.51* kW**

Accumulated energy **108850 kWh**

Accumulated revenue **45396.34 €**

Average revenue per day **39.34 €**

CO2 saved **100.14 t**

Plant works since **2013-01-16**

- Dashboard
- Measurement list
- Data log
- Download data
- Unresolved alarms
- Event list
- Help

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Alarms

Warning 979

Message	Description	Device	Start Time	End Time
E-7401: Varistor defective	At least one of the thermally monitored veristors is c	Inverteris 2	2015-12-21 15:24:49	2015-12-21 15:24:53
E-7508: Fan fault	One of the external fans is blocked	Inverteris 2	2015-12-21 15:24:34	2015-12-21 15:24:49
E-7401: Varistor defective	At least one of the thermally monitored veristors is c	Inverteris 2	2015-12-21 09:57:13	2015-12-21 09:57:18
E-7401: Varistor defective	At least one of the thermally monitored veristors is c	Inverteris 2	2015-12-21 09:57:13	2015-12-21 09:57:18
E-7401: Varistor defective	At least one of the thermally monitored veristors is c	Inverteris 2	2015-12-21 09:57:13	2015-12-21 09:57:18
E-7508: Fan fault	One of the external fans is blocked	Inverteris 2	2015-12-21 09:57:00	2015-12-21 09:57:13
E-7508: Fan fault	One of the external fans is blocked	Inverteris 2	2015-12-21 09:57:00	2015-12-21 09:57:13
E-7508: Fan fault	One of the external fans is blocked	Inverteris 2	2015-12-21 09:57:00	2015-12-21 09:57:13
E-8401: Overheating	Inverted disconnects on AC and DC sides due to ov	Inverteris 2	2015-06-03 04:50:40	2015-06-03 04:50:59
E-8001: Derating occurred	Power supplied by the inverter has beend reduced to	Inverteris 2	2015-06-03 04:50:40	2015-06-03 04:50:59
E-8301: Lightning protection inactive	At least one surge arrester is defective	Inverteris 2	2015-06-03 04:50:40	2015-06-03 04:50:59
E-8302: Lightning protection inactive	At least one surge arrester is defective	Inverteris 2	2015-06-03 04:50:40	2015-06-03 04:50:59
E-8302: Lightning protection inactive	At least one surge arrester is defective	Inverteris 2	2015-04-13 06:40:10	2015-04-13 06:40:18
E-8401: Overheating	Inverted disconnects on AC and DC sides due to ov	Inverteris 2	2015-04-13 06:40:10	2015-04-13 06:40:18
E-8001: Derating occurred	Power supplied by the inverter has beend reduced to	Inverteris 2	2015-04-13 06:40:10	2015-04-13 06:40:18
E-8301: Lightning protection inactive	At least one surge arrester is defective	Inverteris 2	2015-04-13 06:40:10	2015-04-13 06:40:18
E-8301: Lightning protection inactive	At least one surge arrester is defective	Inverteris 1	2014-09-23 07:23:01	2014-09-23 07:23:03
E-8302: Lightning protection inactive	At least one surge arrester is defective	Inverteris 1	2014-09-23 07:23:01	2014-09-23 07:23:03
E-8401: Overheating	Inverted disconnects on AC and DC sides due to ov	Inverteris 1	2014-09-23 07:23:01	2014-09-23 07:23:03
E-8001: Derating occurred	Power supplied by the inverter has beend reduced to	Inverteris 1	2014-09-23 07:23:01	2014-09-23 07:23:03

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 Showing from 1 to 20 of total 979 values

▲ Minor 0

No alarms occurred!

● Major 290

Total alarms occurred 290!

■ Critical 62

Total alarms occurred 62!

LET'S CREATE INNOVATIONS TOGETHER!



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