Energy Brain Cloud

Energy Brain Cloud is the software for displaying and managing via a web browser (on a variety of devices such as PCs, tablets and Smartphone) instantaneous measurements and historic graphs acquired by the Electrex devices.

The cloud computing technology makes possible to manage the collected data via a standard Internet browser without installing any software on the user's computer or mobile device.

Versions

Energy Brain Cloud can be used in various modalities:

- **Local (on-premises)**: the application is installed at the end user's facility which manages it autonomously making the data available only within its local LAN

- **Remote (SaaS)**: the application is installed at the end user's hosting / service provider managing it autonomously and making the data available both within its local LAN and externally

- **Service managed by third parties**: a third party (energy consultants, Energy Service Company, trade associations, etc.) installs and manages Energy Brain Cloud at its headquarters and makes available to its customers / associates their data as a service

- **Service managed by Electrex**: the application is hosted by Electrex. We take care of downloading the data from the instruments installed at the end user's facility and we make them available as a service.

The Dashboard

Energy Brain Cloud is composed of an instrument panel (dashboard) in which it is possible to manage several functionalities. The basic elements of the dashboard are graphical components called widgets. In the widgets the user can select to display instantaneous and historical values, statuses (on / off), alarms, etc.. using standard or custom graphical interfaces.

The user can select the Widgets with the desired measures and compose their own personalized dashboard. The widgets can be organized in multiple tabs with editable titles.
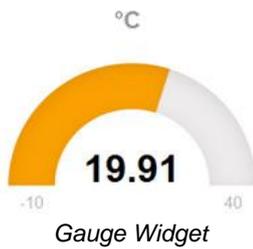
The widgets

The widgets can display the measurements retrieved by all the Electrex instruments: electricity, temperature, humidity, luminosity, gas, water, steam, CO2, compressed air, calories, etc., or values calculated starting from a measurement (e.g. cost of energy in Euro).

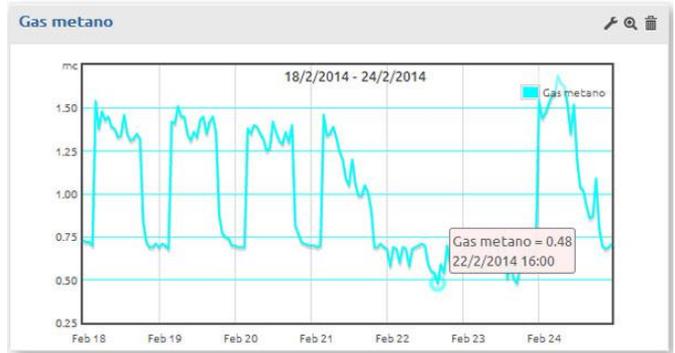There are 3 types of widgets.

Measure Widgets

The Measure widgets show instantaneous measurements, total counters, alarms, status (On/Off). It is possible to choose between three widget types: Gauge, Analog counter and Custom Background. The last one allows to upload a jpg, png and gif image and use it as the widget's background.
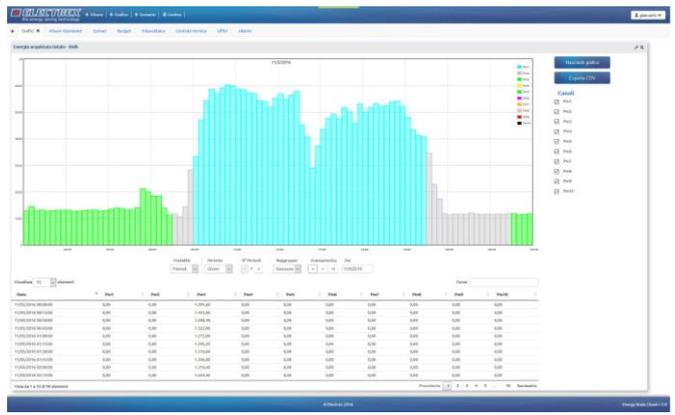

Gauge Widget

Total Counter

Examples of background images

Graph Widgets

The Graph widgets display graphs with historical data logged from the Electrex devices.

Gas metano

All the data displayed on the graph are listed in a table positioned below the graph and can be exported in a CSV file.

Scenario Widgets

In the Scenario widgets it is possible to upload an image (jpg, png and gif) and use it as a background on which are overlaid tooltips showing measurements from Electrex devices. The tooltips can be positioned just by "drag and drop" permitting to set up a mimic diagram.
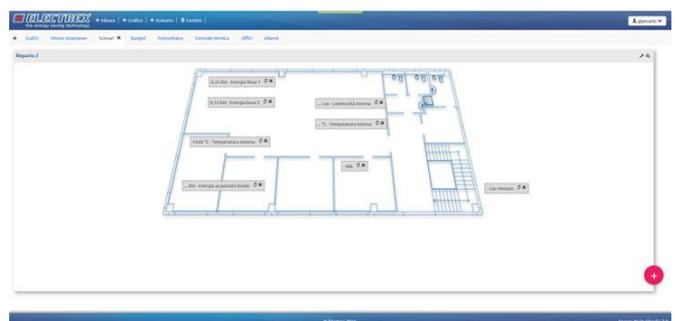
In the Scenario widgets it is possible to display:

Measurements – real-time readings and counters on which it is also possible to set alarms

Labels - which allow you to add notes and comments that facilitate the interpretation of the widget

Commands - buttons that, when pressed, set a value in an instrument Modbus register, allowing you to switch on, switch off, set thresholds, etc.
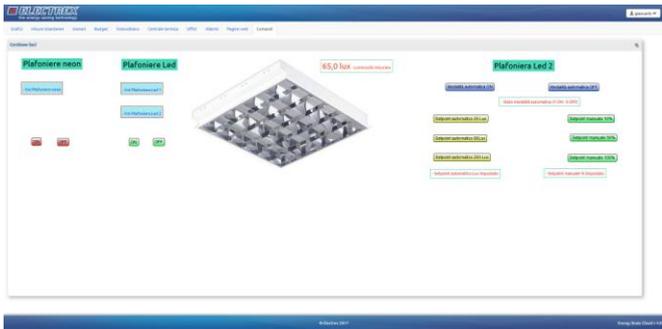
The graphics of measures, labels and commands can be customized by adjusting the size and color of the text, the color of the background, the presence of borders, etc.

Example of Scenario widget with building plant

Example of Scenario widget with production line machinery

Example of Scenario widget with Label and Command tooltips

The dashboard configuration Menù

In order to compose the dashboard, the user has at its disposal the following menu

The menu allows to create, change position by dragging and configure the widgets. It's possible also to set alarms/notifications (graphical / on display or audio type) triggered by a value threshold monitoring.

Using the menu on the right side, the administrator has access to the user management section. The standard users, if previously enabled from the admin, can edit the dashboard and the widgets.

The interactive modality of the Graph widget

Clicking on the zoom icon it is possible to enter in the interactive modality of the Graph widget.

Daily temperature (°C) and humidity (%) graph

Weekly electricity (kWh per each tariff) graph

Monthly energy costs (in Euro per each tariff) graph

ELECTREX — the energy saving technology

Engineered and manufactured in Italy
Made in Italy
Pensato, progettato e prodotto in Italia

Energy Brain Cloud

Weekly gas consumption graph (mc)

Daily graph on the Key Performance Indicator - KPI of a heat pump

Daily graph of the energy production of a PV system with the relative baseline

Within the interactive modality it is possible to:

Change the time period to which the data refer and their grouping unit (hours, days, weeks, months, years).

Selection of the period of the sampling unit

Show or hide the curves displayed on the graphs.

Export the data in CSV files.

	A	B	C	D	E
1	Data	Ea[Totale] Euro	Ea[1] Euro	Ea[2] Euro	Ea[3] Euro
2	gennaio-13	€ 295,85	€ 174,85	€ 53,67	€ 67,33
3	febbraio-13	€ 245,55	€ 147,05	€ 42,15	€ 56,35
4	marzo-13	€ 247,92	€ 139,10	€ 44,84	€ 63,98
5	aprile-13	€ 90,73	€ 48,99	€ 15,46	€ 26,28
6	maggio-13	€ 103,21	€ 47,20	€ 21,85	€ 34,16
7	giugno-13	€ 138,51	€ 84,49	€ 20,54	€ 33,48
8	luglio-13	€ 226,33	€ 158,34	€ 31,66	€ 36,33
9	agosto-13	€ 88,11	€ 24,34	€ 21,95	€ 41,82
10	settembre-13	€ 135,32	€ 70,80	€ 26,57	€ 37,95
11	ottobre-13	€ 240,12	€ 160,03	€ 41,75	€ 38,34
12	novembre-13	€ 281,03	€ 164,77	€ 43,43	€ 72,83
13	dicembre-13	€ 220,92	€ 120,46	€ 33,54	€ 66,92
14		€ 2.313,60	€ 1.340,42	€ 397,41	€ 575,77

Multi-user interface

Energy Brain Cloud allows multi-user through an authentication interface. Each user can access only the data that has been enabled by the system administrator.

Energy Brain Personal Cloud

Energy Brain Personal Cloud is an option that can be added to an Energy Brain software license.
This is a single-user version of Energy Brain Cloud that can only be used on the PC in which the Energy Brain application is installed.

How to order

Type	Code
Energy Brain Cloud 4.X 32 - 100 SK	PFSWEC1-SK4
Energy Brain Cloud 4.X 32 - 100 HK	PFSWEC1-HK4
Energy Brain Cloud 4.X 300 - 1000 SK	PFSWEC2-SK4
Energy Brain Cloud 4.X 300 - 1000 HK	PFSWEC2-HK4
Option Energy Brain Personal Cloud	PFSWEC0-020

ELECTREX — the energy saving technology

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