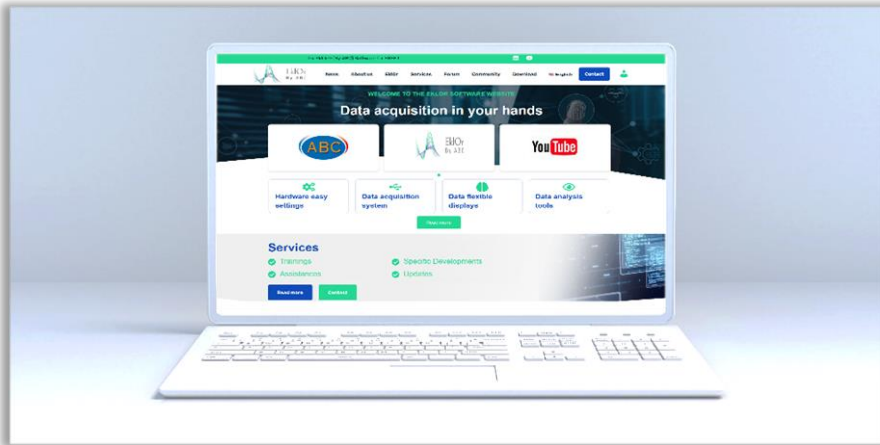


## Data Acquisition System



Use function modules on the EklOr® software product to interactively develop Windows-based applications, with custom user interfaces that acquire, display, and analyze data.

## Overview

Rapidly changing measurement, control and treatment tasks require flexible systems. With the Windows-based EklOr software product, you can easily develop and deploy a wide range of applications, in a very short time. Use EklOr to interactively develop Windows-based data acquisition applications, by simply using our wide range of native tools.

EklOr enables live data analysis and monitoring, as well as the ability to create custom user interfaces. Unlike other programming environments, which can require weeks of training to master, EklOr only requires a very short learning period. Configuring an application under EklOr can be done in a very short time.

## Features

- No IT expertise required
- Intuitive handling and quick learning for all users
- Data acquisition, analysis, control, and display modules
- Customized user interfaces and professional report generation
- Editing scripts for automation operations
- Many native tools included
- Translatable

## Supported Operating Systems

- Microsoft Windows® 11/10 (32/64-bit)

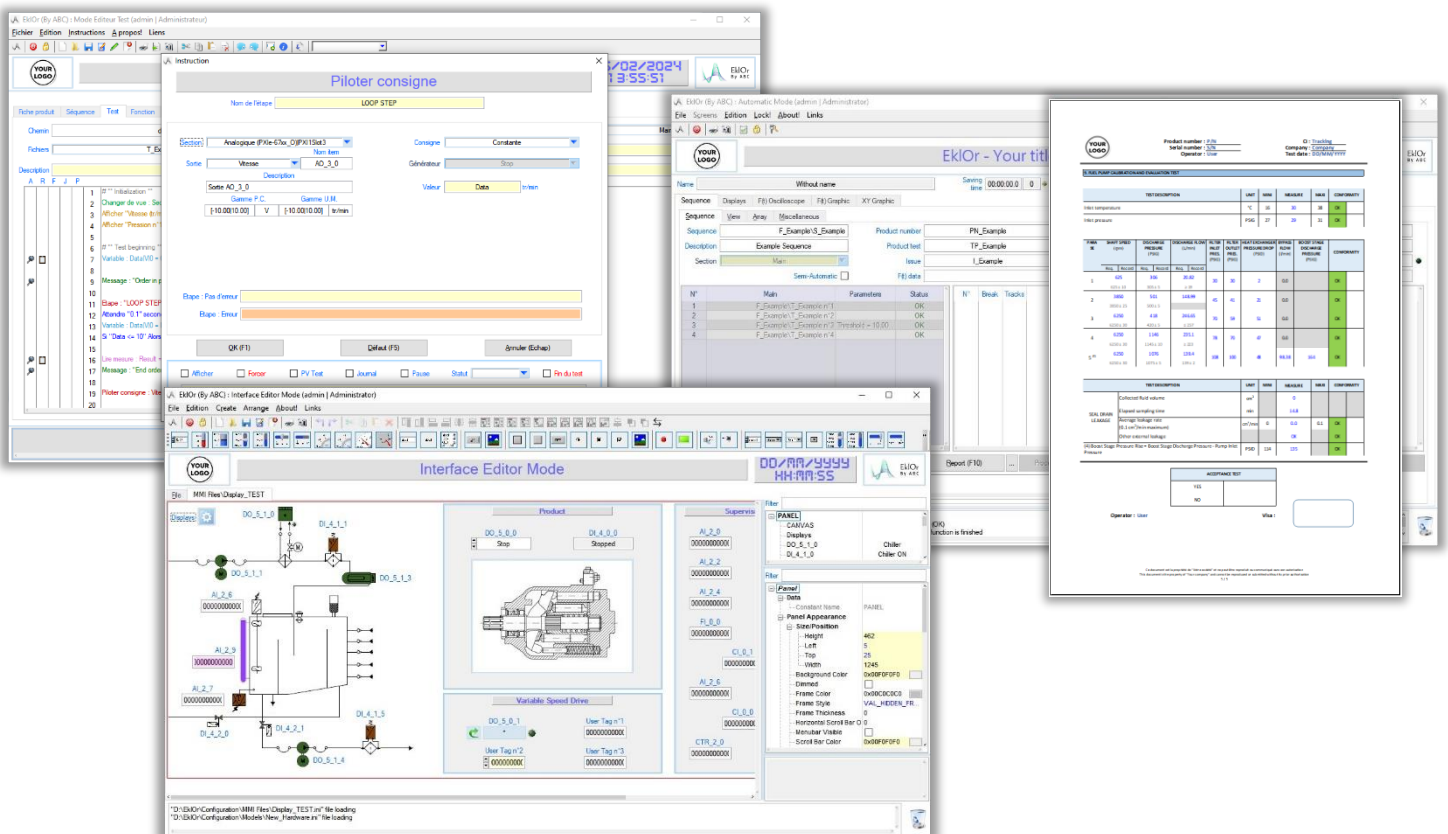
## Supported Hardware

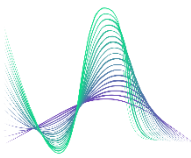
- Wide range of hardware products

## Versatile and Flexible

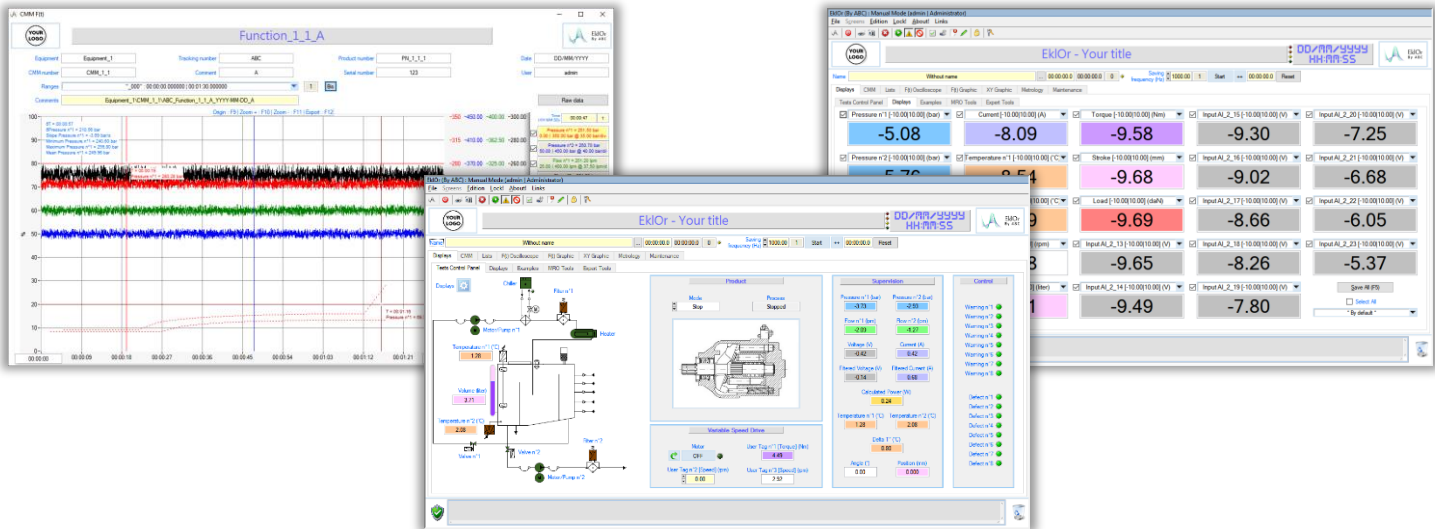
EklOr has a variety of testing and measurement monitoring processes. A wide of analysis, control, and display modules are available for creating applications.

By combining different features, users can turn a computer into an oscilloscope, multimeter, or data recorder, and analyze different signal types.





## Data Acquisition System



## Data Displays

EklOr has a wide variety of display formats, to facilitate data analysis, including the following features:

- Customizable interfaces
- Graph with templates
- Tools integrated into curves
- Data overlay
- Calculated and filtered channels

## Data Storage

Customize the names of your data saving files in your applications.

Data management, based on an "ASCII" (TXT) format from EklOr, resulting from many years of experience, allows you to significantly optimize the size of your data in your storage space.

While maintaining high compatibility when exchanging data with other applications.

## Live Data Analysis and Control

Live data analysis and control functions are available, including modules to perform the following operations:

- Wide variety of calibration methods
- Digital filtering
- Accurate calculations of characteristics
- Security operations
- Data monitoring
- Data statistics (S.P.C.)
- Operational analyzes (O.E.E.)

## Users Interfaces

Use custom interfaces to organize functional views around your data.

Display data through the use of objects specific to the world of measurement, such as switches, digital and analog indicators, gauges, meters, probes, thermometers, etc... and connecting them to your data.

Add text, custom pictures or animated elements to improve the clarity and usability of your applications. So your interfaces will be personalized with pertinent information to a specific test.

The EklOr application can contain multiple animated "user" interfaces, and each interface can be dynamically activated based on prescribed conditions within a test or depending on the user's access level.

Some features can be configured to be displayed on different screens while keeping the main view visible on a dedicated screen.

## Help and Project Examples

The EklOr website offers example projects.

The EklOr website also offers free community support, through its forum.

Do not hesitate to come and consult it:

<https://eklor-by-abc.com>

## State Machine

The State Machine implements a succession of operations in a simple way. Users can define steps with conditions for moving from one step to the next, and perform operations on data or variables, based on these conditions.

With internal timers and adjustable timeouts for steps, users can set up sophisticated sequences. Easily rearrange your operations, easily inserting, deleting, or adding steps in the State Machine.

## Simplified Tests Sequencer

Test campaigns can be created in a simple and interactive way, equivalent to creating a flowchart of instructions, without any programming.

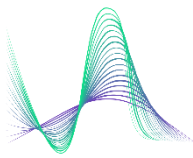
Easily and individually customize your test campaigns, according to the needs of your products.

Each instruction has a dedicated and simplified window to facilitate its configuration.

Customize your report generation, the way you want, quickly and effortlessly.

## Script Sequencer

Automatic mode allows to supervise the execution of test scenarios, in an automated and secure manner, based on conditions and events, defined by the user. The displays and reports generated are completely adapted to the products, by the user.



## Analog Output Generators

The EklOr software package currently has several control shapes for analog outputs, on compatible National Instruments hardware.

If the control of fixed values is agreed, for compatible hardware, it is also possible to generate synchronized ramps or waves (sine, square, triangle, sawtooth, etc...).

Just like more complex shapes: trapezoidal, data following for endurance tests, commonly also called "F(t) files", etc...

## Quadrature Encoder Support

EklOr manages the encoder mode on National Instruments hardware allowing it, in order to calculate the position and/or speed, relative and/or absolute, of phase quadrature encoders. Angular and linear encoders are supported.

Phase A, phase B and Z index are supported for each connected encoder. X1, X2 and X4 counting modes are provided to count encoder inputs.

Debounce circuits eliminate switch-induced transients that can occur with encoders.

Refer to the hardware manual for more information.

## Counters

The EklOr software package manages the various counting methods (edge counting, frequency, period, etc...) on compatible National Instruments hardware.

## Communication with PLC drives

The EklOr software package allows you to interface with numerous PLCs drives (Siemens, Schneider, Crouzet, TOX, Omron, etc...) through recognized protocols such as: Serial and Ethernet links, Profibus-DP, Ethernet/IP and Profinet, etc...

The "RS-232/RS-485/RS-422" Serial (Modbus RTU) or TCP/IP Ethernet (Modbus) links protocols do not require the installation of specific communication equipment.

Hardware protocols such as Profibus-DP, Ethernet/IP and Profinet are currently possible through the use of a cifX card from Hilscher.

## Coming soon

From its past, the EklOr software package integrates many protocols, already reliable. But, on which some missing functionalities, and necessary for their flexibility, have not yet been achieved. Our teams are currently working on these developments, in order to make them fully accessible shortly.

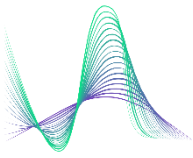
The same goes for National Instruments hardware, such as the RIO compact (Real-Time and FPGA) from National Instruments.

As well as the "netHOST" gateway from Hilscher.

Furthermore, other field protocols (EtherCAT, etc...) from Hilscher should also see the light of day.

As well as ADLink hardware, such as input and output cards, in analog and digital formats.

Try for FREE  
EklOr® (By ABC) Software Package  
In FULL version - 30 Days  
<https://eklor-by-abc.com>



To support you in configuration, operating and adapting projects to your needs,  
we offer a large range of services:

## Assistances

To assist you punctually, we can travel to your plant (in France) or remotely (by video conference or audio conference).

These services may include (non-exhaustive list):

- Installation assistance
- Setting assistance
- Project creation assistance
- Resolution of specific problems

Any need for assistance can be investigated.

## Specific Developments on Request

The EklOr software integrates a wide variety of basic features to surely cover the scope of your project management.

However, specific needs can be identified, to go even beyond this scope, and make it possible to complete the features of EklOr software.

In this context, a system of plugins can be implemented.

These additional plugins can be developed to extend the feature for specific needs.

## Trainings

We are able to adapt our training with the flexibility and modularity that suits you.

Several training topics exist to address the various aspects or features of the EklOr software.

Our training allows us to meet the most frequently encountered needs, but they can be adapted according to the expectations of your employees.

Our training courses are open to all.

We compensate for the disability in training by providing individualized and adapted responses, in order to make the provision of training "accessible" to people in difficulty.

## Help and Support

The EklOr website provides users with presentation videos, as well as tutorials, to help you get started with the EklOr software package.

We also invite you to consult our frequently asked questions (FAQ), where we answer the main questions you ask yourself.

The EklOr software package offers free community support, through the forum on its website. Don't hesitate to reach out by asking other members of the community for help.

**Contact Us**  
[contact.eklor@abc-essais.com](mailto:contact.eklor@abc-essais.com)