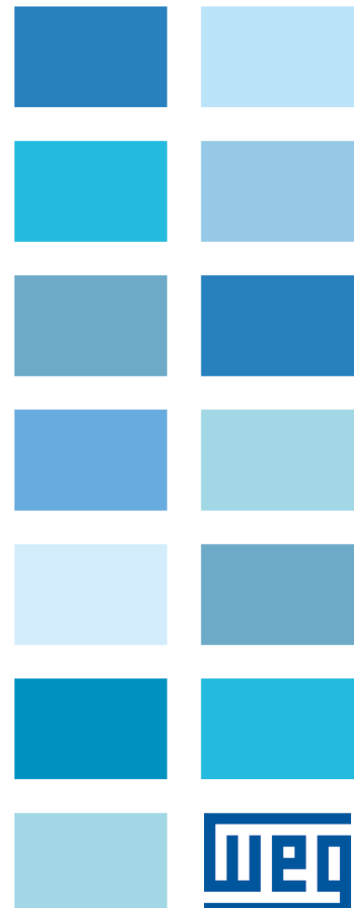
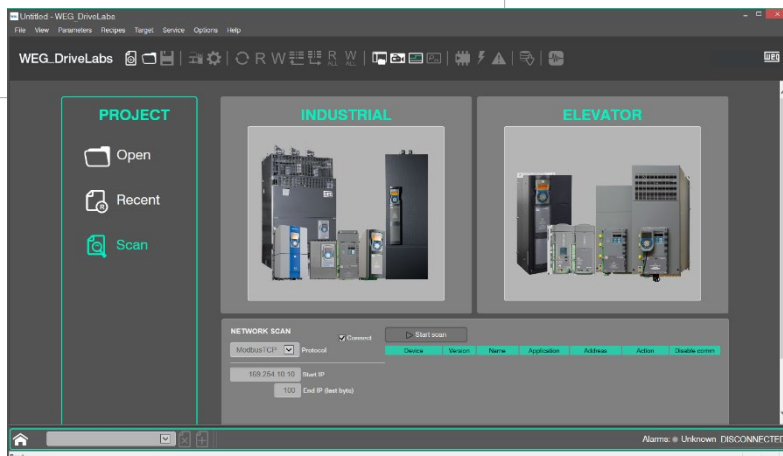


PC configurator

WEG_DriveLabs

User manual

Language: English



Thank you for choosing this WEG product.

Please send any feedback you may have that would help us to improve this manual to the following e-mail address: techdoc@weg.net. We would be happy to receive it.

Before using the product, read the safety instruction section carefully.

Keep the manual in a safe place and available to engineering and installation personnel during the product functioning period.

WEG Automation Europe S.r.l. reserves the right to modify products, data and dimensions without prior notice.

The data can be used only for the product description and cannot be understood as legally stated properties.

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1 Introduction

WEG_DriveLabs is the WEG Automation Europe product configurator that makes it possible to connect one or more devices (targets) to monitor status, check information, read/write parameter values.

The WEG_DriveLabs configurator enables the user to connect and configure WEG Automation Europe devices with special pages, toolbars, and statusbars.

The operations available are:

- Device-PC communications via an Ethernet RJ45 port using Modbus TCP protocol
- Creation and management of projects with single drives or even with multiple devices. The configurator is an SDI (Single Document Interface) application, and thus can only work with one project at a time.
- Read and write parameters
- Save parameters to the device's flash memory
- Check device status
- Softscope (integrated real-time oscilloscope)

1.1 Requirements and PC connection

- Minimum PC requirements: PC operating system Windows 7 or higher, 512 MB RAM, 1 GByte available hard disk space, Screen 1024 x 768, Ethernet port
- Direct Ethernet RJ45 category 5E shielded cable, maximum length 10mt

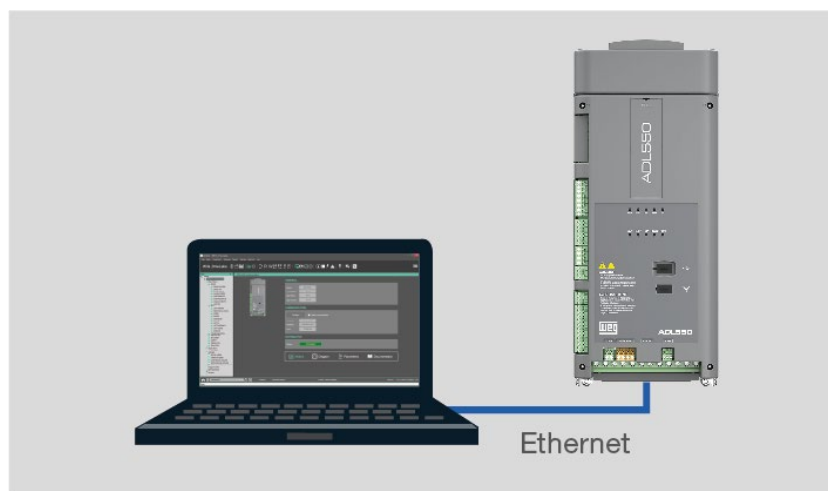


Figura 1. Wired connection via the Ethernet port using the Modbus TCP protocol

2 Installation

To install the WEG_DriveLabs configurator, run the Setup program found in the “DOWNLOAD CENTER” section on the WEG site, i.e:

https://www.weg.net/catalog/weg/IT/en/p/MKT_WDC_GLOBAL_PRODUCT_INVERTER_FOR_ELEVATOR_ADL500

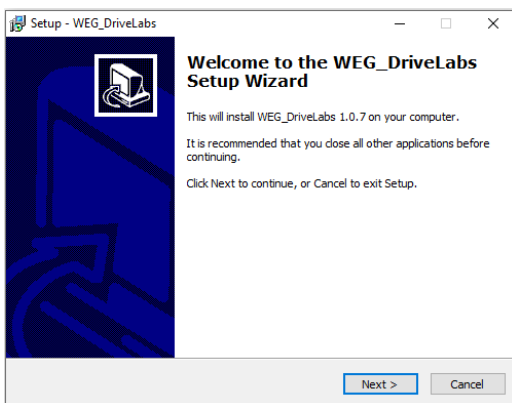
Example of Setup file:

WEG_DriveLabs_1.0.0.exe

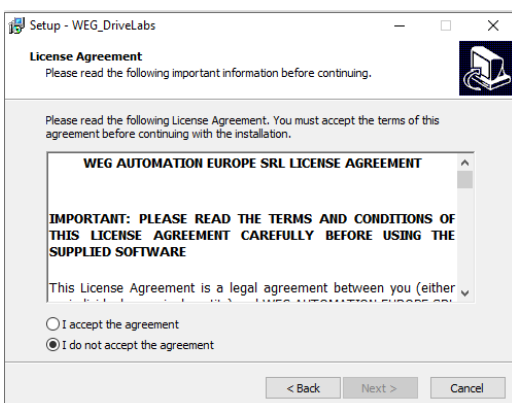
2.1 Installing the programme

The following steps must be followed to install the WEG_DriveLabs software:

1. Launch **WEG_DriveLabs_X.X.exe**. This will display any warnings and the welcome screen:

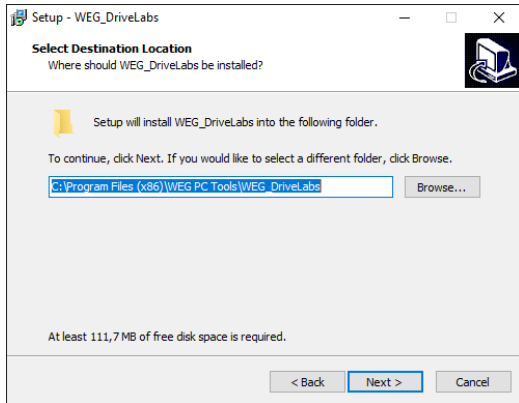


2. Click *Next* to move on to the next screen

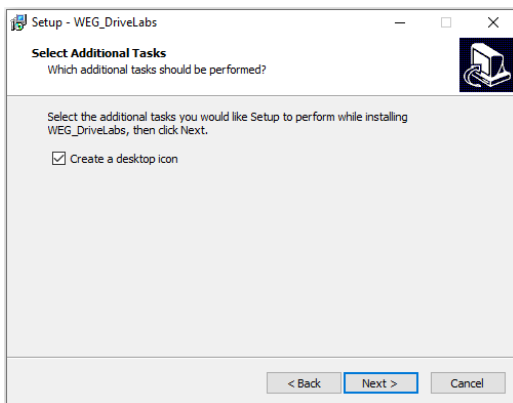


3. Read the user licence, choose *I accept the agreement* and click *Next* to continue.

4. Select the installation folder and click *Next* to continue.

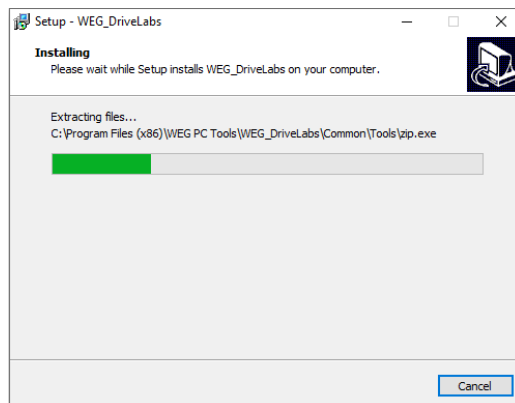
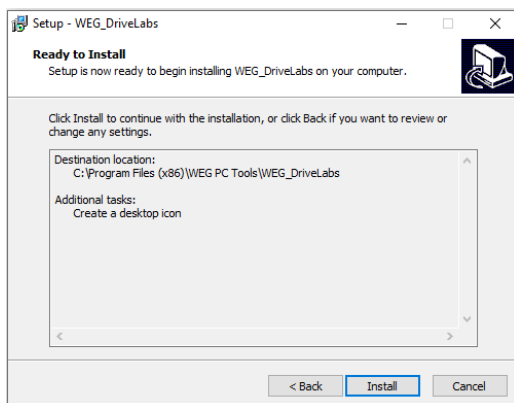


5. Select the main menu folder and click *Next* to continue.

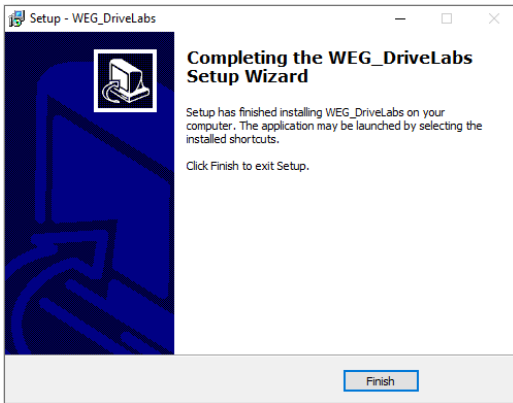


6. Select installation of desktop icon and click *Next* to continue.

7. Check settings and click *Install* to continue; this starts file extraction



8. When file extraction is completed, the last installation screen appears:



9. Click Finish to close the installation program.

3 Functions

3.1 Project

A project may consist of one or more devices of any type and version.
Devices can be added or removed from an existing project at any time.
A project device can also be upgraded to new versions.
The devices in a project are managed by the configurator independently of one another.

3.2 Device connection (Target)

The configurator enables the user to specify the communication settings each device uses to communicate with each of the physical devices that are part of the project.
Connection can be made to physical devices (targets) once the communication settings for each device in the project have been configured.

3.3 CONNECTED mode

The “Connect” command changes the status of the configurator to online mode. When Connected mode is active, the configurator starts communicating with the targets using the communication settings specified. Polling of a dedicated parameter is used to determine whether the target is actually connected. If one of the target devices cannot be reached, the connected mode still remains active and continues polling the devices but the connection status indicates ERROR.
When all targets respond correctly to polling requests, the connection status indicates CONNECTED.

3.4 Interaction with devices (Target)

The interaction between the Configurator and each target device is based on parameter reading and writing, performed using a set communications protocol.
When the parameter for a connected device is read by the configurator, the value is saved in the project.

Read/write operations can be fully managed by the user:

- read only one or more selected parameters,
- read a set of parameters cyclically,
- read all parameters simultaneously.

It is possible to write a single parameter, a group of parameters or all device parameters using specific commands. Restoring of default parameter values is also supported.

3.5 Applications

An application is a WEG_DriveLogic project that can be directly downloaded to the target from the configurator and can be associated with devices that support applications.

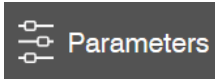
3.6 Recipes

These make it possible to group a set of parameters chosen by the user (recipe) in a single menu.

4 Menu and Toolbar

4.1 User interface

Click on the Parameters button from the device configuration page.



Main Menu Main user interface frame, used to display pages and parameter tables (grids) opened by other controls/tools.

Menu General drop-down menu.

Toolbar The main function bar, presenting user-friendly icons activated under View / Tool windows / Toolbar.

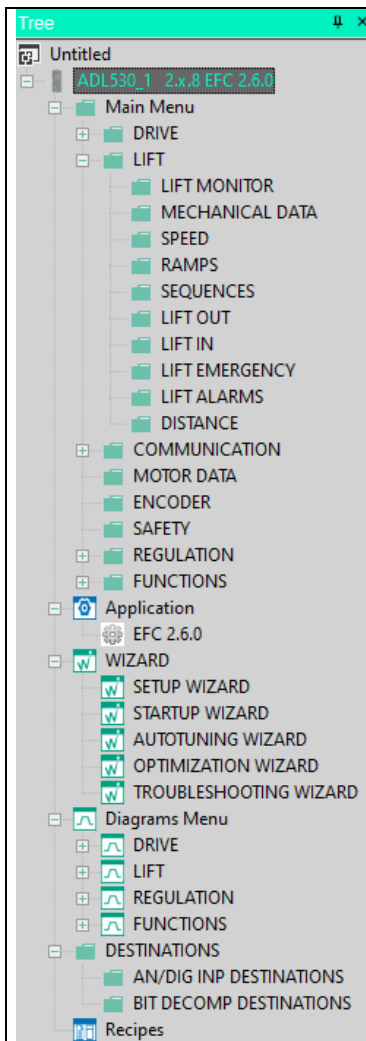
Tool panel Displays the submenus (Catalog, Monitor, Output, Connection Status, Graph, Quick Control) that can be activated under View / Menu windows.

Quick Control Commands represented by user-friendly icons to:

- add a new device to the project
- remove a device from the project
- navigate to the Home page (Main page: Industrial / Elevator selection) or to the device configuration page (Device main page).

Status bar Can be activated under View / Toolbar.

Tree Panel Used to navigate the project and add/remove catalogue components to/from a project.



Product configuration page

Left-click on the device node (e.g. ADL530_1) to return to the main configuration page.

Disable communication

Right-clicking on the device node (e.g. ADL530_1) opens a pop-up with the **Disable communication** selection; this can be used to prevent the device from communicating.

Main menu

Left-click on the menu node to display the parameters (e.g. LIFT MONITOR).

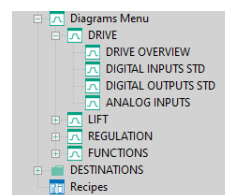
WIZARD

Left-click on the configuration menu node (Wizard) to call up the relevant configuration pages (e.g. SETUP WIZARD).

SETUP WIZARD	STARTUP WIZARD	OPTIMIZATION WIZARD	TROUBLESHOOTING WIZARD
<i>SETUP is a guided procedure that is presented to the user when the drive is first turned on, allows all the files required for the user's needs and the type of system to be imported</i>	<i>STARTUP is a guided procedure used for quick start-up of the drive that helps to set the main parameters. It consists of a series of steps, relating to the various sequences for entering and calculating the parameters necessary for correct drive and lift application operation</i>	<i>OPTIMIZATION allows to immediately optimize the control response in order to maximise cabin comfort. Three to five levels of optimization are available for each of the parameters</i>	<i>TROUBLESHOOTING is a form of problem solving guided process of determining and remedying the causes of drive and system malfunctions and underperforming</i>

Diagrams menu

Left-click on the Diagrams menu node to open the function block diagrams (e.g. DIGITAL OUTPUT STD).



Recipes

Right-click on the Recipes node and select **Add Recipes** (to add a new Recipe) or **Import Recipes** to import a Recipe that is already available.

4.2 Menu

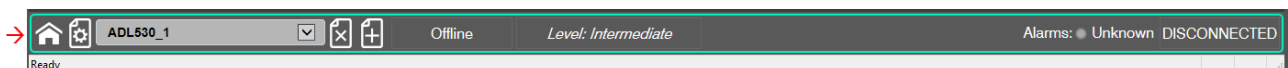
File View Parameters Recipes Target Service Options Help

“File” Menu

New (Ctrl + N)	Starts a new project (blank). Only one project can be active at a time.
Open (Ctrl + O)	Opens an existing Project (with extension .gfl), opens the Windows PC search window to find the project.
Save (Ctrl + S) / Save as	Saves the active Project with the .gfl extension.
Close	Closes the Active Project.
Print (Ctrl + P)	Prints the main active window/grid.
Print Preview	Provides the print preview for the active window.
Print Setup	Print settings (output, format and orientation).
Change Language	WEG_DriveLabs language selection (menus and parameters). The available languages are displayed. The programme must be rebooted for the choice to take effect.
Change Menu Access Level(*)	Sets the parameter menu access level. A password may be required to change to a higher level. (0) Readonly: read-only parameters. (1) Easy: main parameters required for basic start up. (2) Intermediate: parameters for initial optimization. (3) Expert: all parameters except for Service menu and parameters, for an advanced optimization. (4) Service: All parameters are displayed. Reserved for service. (*) <i>Number of levels depends on type of device</i>
Recent File	Recent projects are displayed.
Exit	Exits the configurator.

“View” Menu

Fullscreen mode	To hide all open tool panels and display only the main window.
Toolbars (Status bar):	Enables/disables displaying of the Status Bar describing menu selection and connection status (connected, disconnected, error).

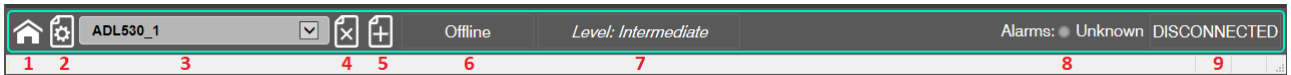


Tool windows	Opens / closes the configuration windows display.
• Tree	Tree describing the project and used to navigate the active project. Makes it easy to open menus, pages and to access other functions.
• Catalog	Information on catalogue version for connected devices.
• Monitor	The parameters to be monitored can be copied in this window using the “drag&drop” function. The list can be saved and used in other projects.

- **Output** Records the results of configurator operations.
- **Connection Status** Provides the connection status of each connected device.
- **Toolbar** Opens / closes the main icon-based menu bar.



- **Graph** Opens / closes the window displaying the value traces for a set of variables. See step 5.3
- **Quick Control** Opens / closes the lower menu bar



- (1) Return to main menu
- (2) Return to configuration menu
- (3) Display / select active device in project
- (4) Remove active device from project
- (5) Add new device to project
- (6) Communication status
- (7) Level: current access level
- (8) Alarm status
- (9) Active device communication status

Default View Return to default screen

Quick Control See above.

Parameter Menu

- Auto refresh mode** When enabled, the configurator cyclically reads and writes all parameters in the parameter table shown in the main window.
- Read selected parameter (Ctrl + R) (*)** Select one or more parameters from a parameter menu table, then select this function. The selected parameters are read from the connected device and the value displayed in the table is updated.
- Write selected parameter (Ctrl + W) (*)** Select one or more parameters from a parameter menu table, then select this function. The default values for the selected parameters are written to the connected device. It has no effect on read-only parameters.
- Read current menu or page** Reads the value of all parameters in the current menu or on the current page.
- Write current menu or page** Writes the value of all parameters in the current menu or on the current page.
- Read all parameters (Ctrl + Shift + R) (*)** Reads the value of all parameters.
- Write all parameters (Ctrl + Shift + W) (*)** Writes the value of all parameters.
- Select all parameters (Ctrl + A)** Selects all parameters for the selected menu.
- Compare parameters** Compares the parameters of different devices in the same project or in a saved file. Options available: "online", "default values", "with file".

Search parameters (Ctrl + F)

Parameter search function (in selected menu) for IPA, Name or Description.

Import values from WEG_eXpress project file

This function imports parameter values from a WEG_eXpress (**) configurator project.

(*) Only when the "Connect" command is active.

(**) Only for devices that support the command.

Recipes Menu

Makes it possible to set a group of parameters chosen by the user (recipe):

Add recipe

When run, it opens a new **New Recipe** menu in the project. It is added to the Recipes node in the Tree menu where it can be renamed (F2 or right-click).

Import recipe

Imports an existing **Recipe** into the active project (.rcp). It is added to the Recipes node in the Tree menu.

Delete recipe

Deletes the selected recipe from the project.

Export recipe

Saves the selected recipe in an .rcp file for use in another project.

Delete selected values

Deletes the values (parameters) selected by the recipe.

Set selected recipe values

Used to set the parameters displayed in the recipe parameters table as recipe values. Select the recipe node and then click "Set selected recipe values" in the menu. To set recipe values in the device (target), select the desired values in the recipe table at any time and then launch the "Write selected recipe values" command.

Write selected recipe values

Writes the selected recipe parameters, see above.

Write ALL recipe values

Writes all recipe parameters.

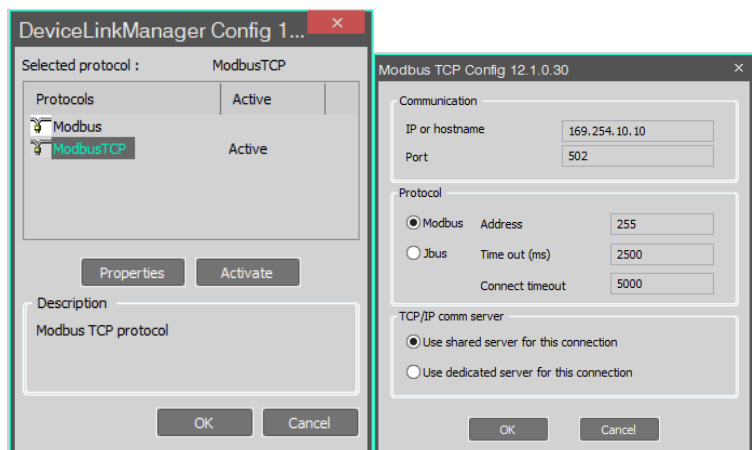
Target Menu

Connect

Starts connection with the connected device

Communication setting

Opens the "DeviceLinkMagager Config" configuration window. From the available communication protocols, press "Properties" to view/edit the properties and press "Activate" to activate the protocol.

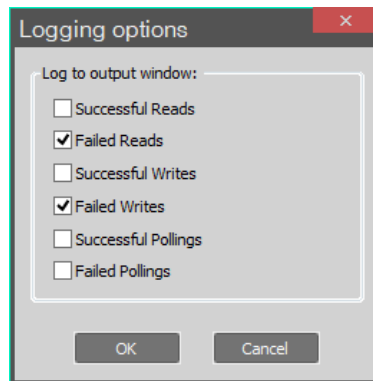


Disable communication	Prevents the device from communicating
Save parameters	Saves the parameters to the device (*).
Load default	Restores the default value for the device parameters (*).
Drive reset	Restarts the device (*).
Download firmware	Command uses the wizard to update the firmware for the connected device (*).

(*) Run the "Connect" command to enable the command

Service Menu

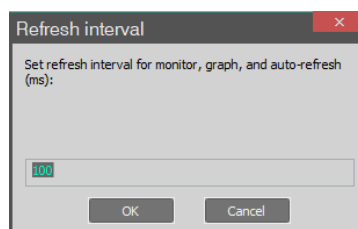
Offline Graph viewer	Tool to display the evolution in the value traces for a set of variables previously saved in .OSC or .OSCX (Oscilloscope XML file) formats. See section 5.3 of this manual for further information.
Show/hide Output	Opens / closes the window showing the status / actions set in the Service / Loggings options menu.
Logging options	Setting the Output window status / actions (Service menu).



Report for service	Reads and saves all parameter readings and the Alarm Log for the connected drive to a file to be emailed to the Service.
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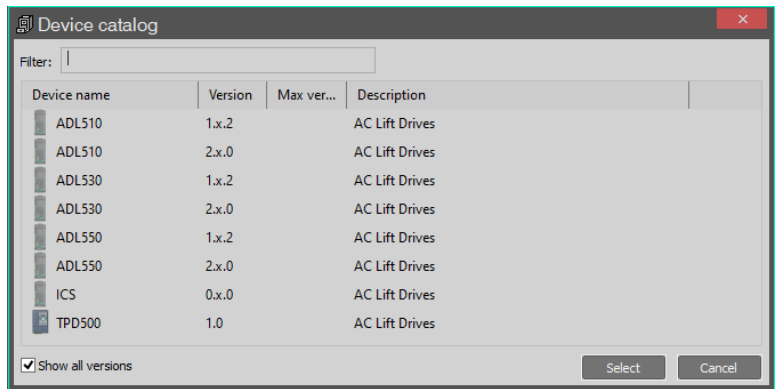
Options Menu

Refresh interval	Sets the refresh time (ms) for monitor parameters, Graph viewer window and auto-refresh
-------------------------	---



Show all versions in catalog

Displays all device versions in the Device Catalog window accessible under View\Tool windows\Catalog



Help Menu

Help

Opens the WEG_DriveLabs Quick Guide Manual

About

WEG_DriveLabs version and copyright information

4.3 Toolbar



- | | |
|--|--|
| (1) New | Starts a new project (blank). Only one project can be active at a time. |
| (2) Open | Opens an existing Project (with extension .gfl), opens the Windows PC search window to find the project. |
| (3) Save | Saves the active Project with the .gfl extension. |
| (4) Connect | Starts connection with the connected devices |
| (5) Communication setting | Opens the “DeviceLinkMagager Config” configuration window (see page 11 for further information) |
| (6) Auto refresh mode | Enables periodic communication updates |
| (7) Read selected parameter (*) | Reads the currently selected device parameter |
| (8) Write selected parameter (*) | Writes the currently selected device parameter |
| (9) Read current menu or page (*) | Reads all device parameters in the currently selected menu or page |
| (10) Write current menu or page (*) | Writes all device parameters to the currently selected menu or page |
| (11) Read all parameters (*) | Reads all parameters from the device |
| (12) Write all parameters (*) | Writes all parameters to the device |
| (13) Tree | Opens / closes the tree menu window (Tree) |
| (14) Monitor | Opens / closes monitor window where the parameters to be monitored can be copied using the “drag&drop” function. The list can be saved and used in other projects |
| (15) Graph | Opens / closes the Tool used to display the evolution in the value traces for a set of variables in .OSC or OSCX (Oscilloscope XML file) formats. See section 5.3 of this manual for further information |
| (16) Search parameters | Parameter search function (in selected menu) for IPA, Name or Description. |
| (17) Access level | Selection of the access level |
| (18) Save parameters (*) | Saves the parameters to the device |
| (19) Drive reset (*) | Reboots the drive (only if connected) |
| (20) Alarms (*) | Opens the active alarms and Alarm Log window |
| (21) Reset | Resets alarms, only if the causes have been eliminated. |
| (22) Download FW (*) | Command uses the wizard to update the firmware for the connected drive |
| (23) SoftScope | Opens Softscope Real time, the integrated oscilloscope with synchronous sampling at 1ms intervals (see dedicated section) |

(*) Only when “Connect” is active

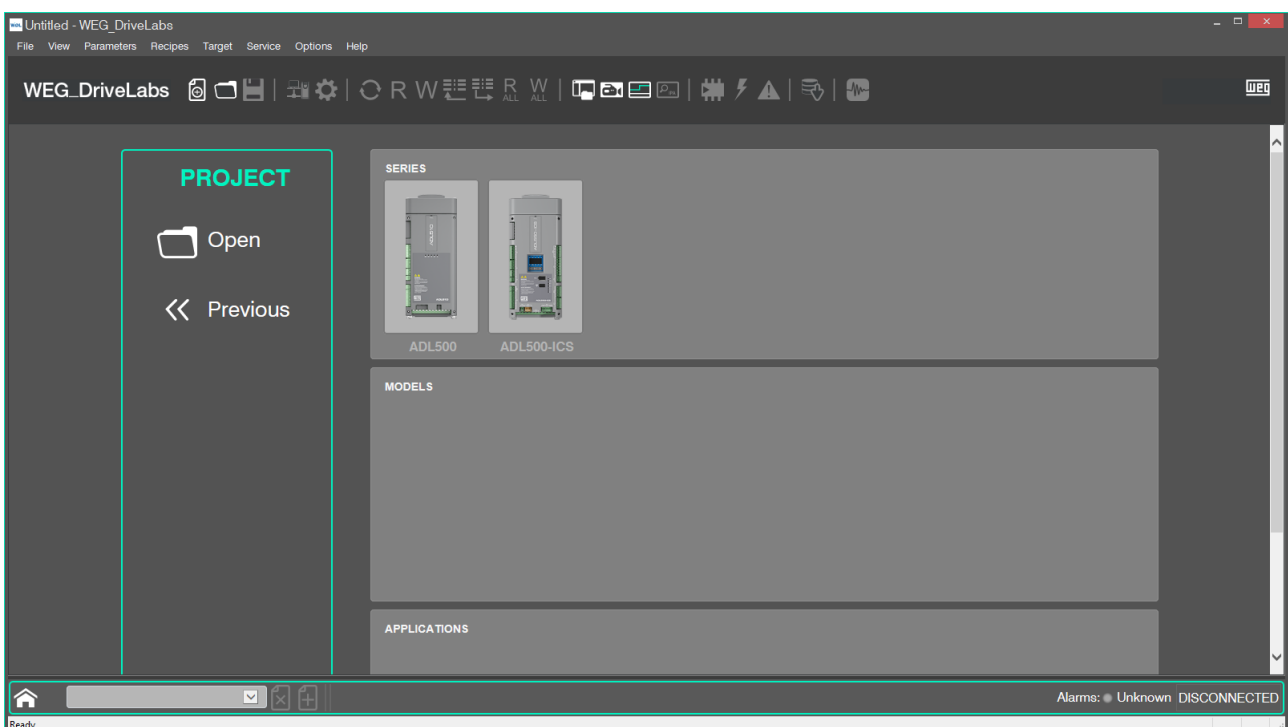
5 Work session

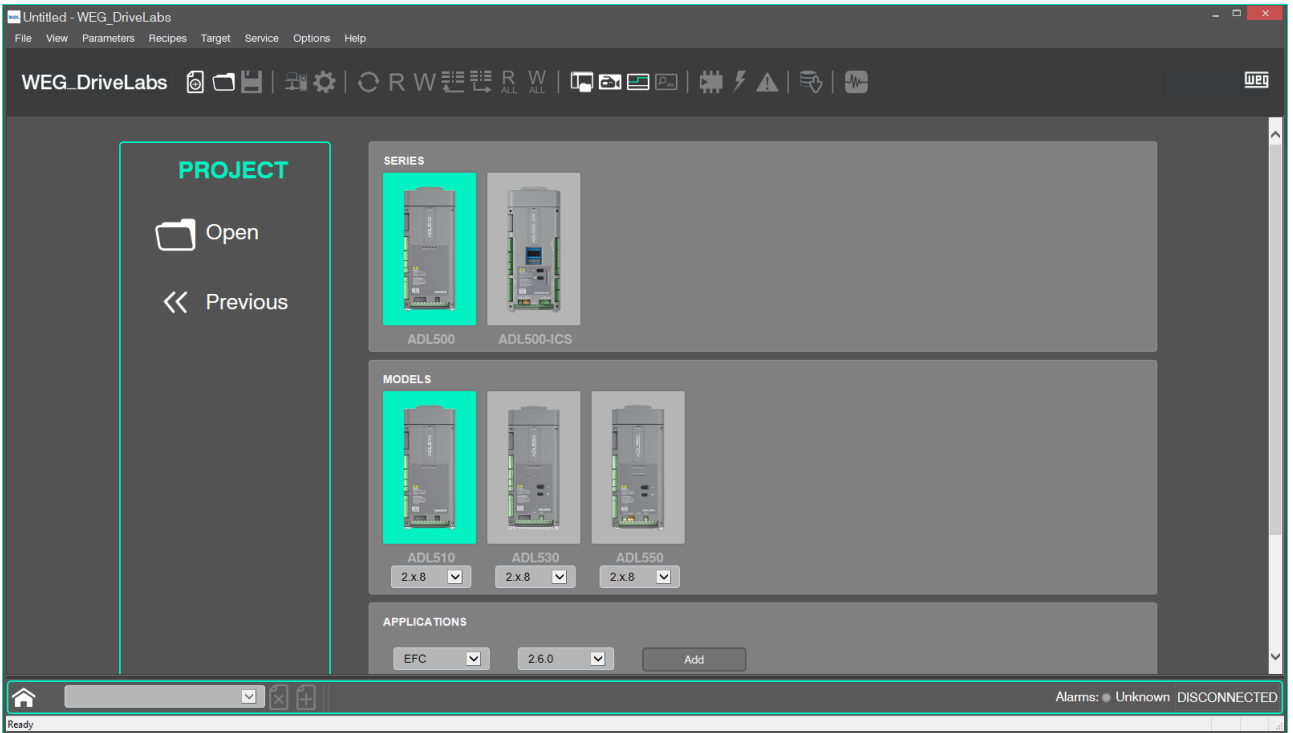
To work with WEG_DriveLabs you must:

- create a new project or use a previous project by opening a file with the “.gfl” extension.
- properly configure the communications options (type of protocol, COM port, baud rate)

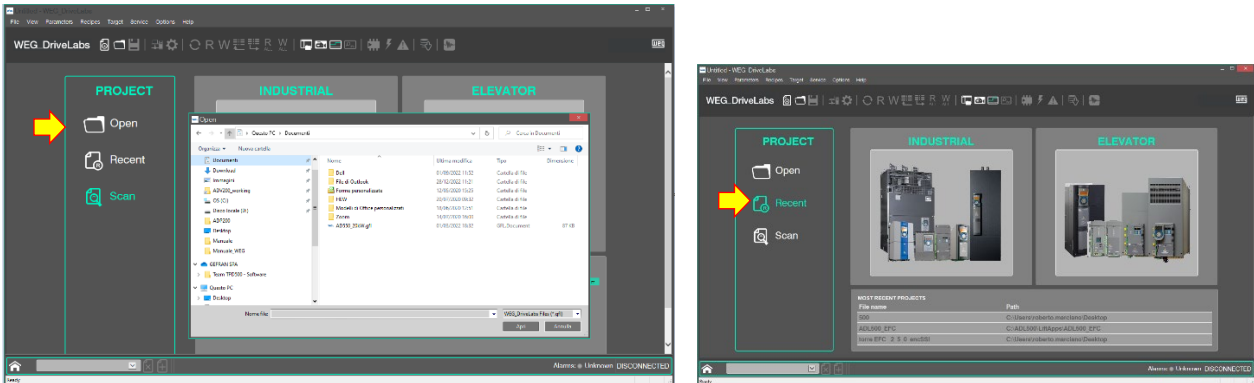
There are two ways to start a work session:

1. Create a new configuration (Project) by first choosing the category (INDUSTRIAL or ELEVATOR) and then the device from the list in the subsequent windows.



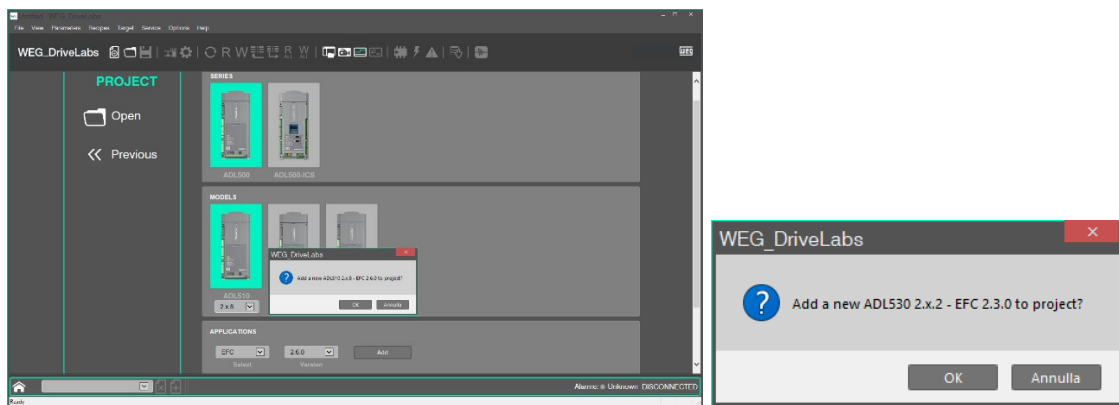


2. Open a configuration (Project) to work with a previously saved Project:
 - open a “gfl” file using the “Open” command under “File” menu or in the Project area of the start window, or
 - click on “Recent” to open the “Most recent project” window and select a file.

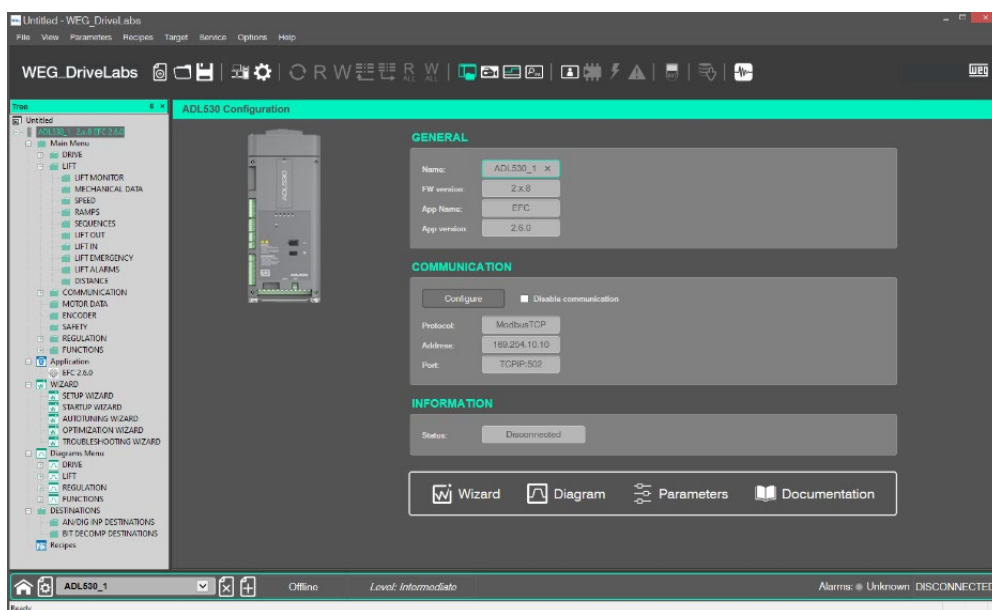


Besides choice of the device, in some products the additional APPLICATIONS area becomes available where the application can be chosen from a drop-down menu.

Select the application and confirm by clicking on OK.



Selecting a device calls up the main page for the selected device.

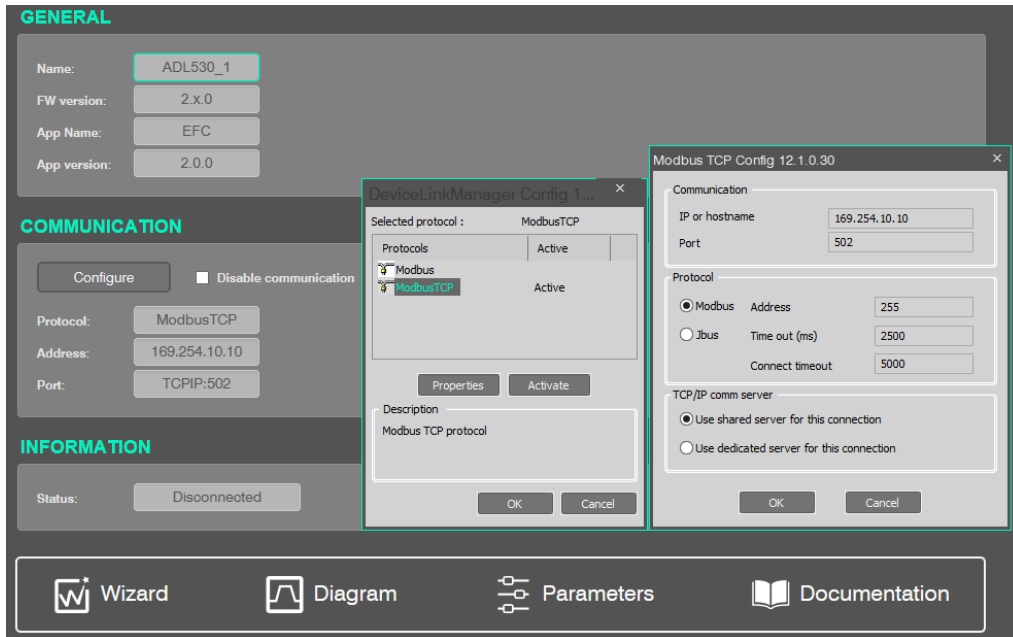


5.1 Accessing the device and setting up communications

Once the device has been selected, the configuration screen appears:

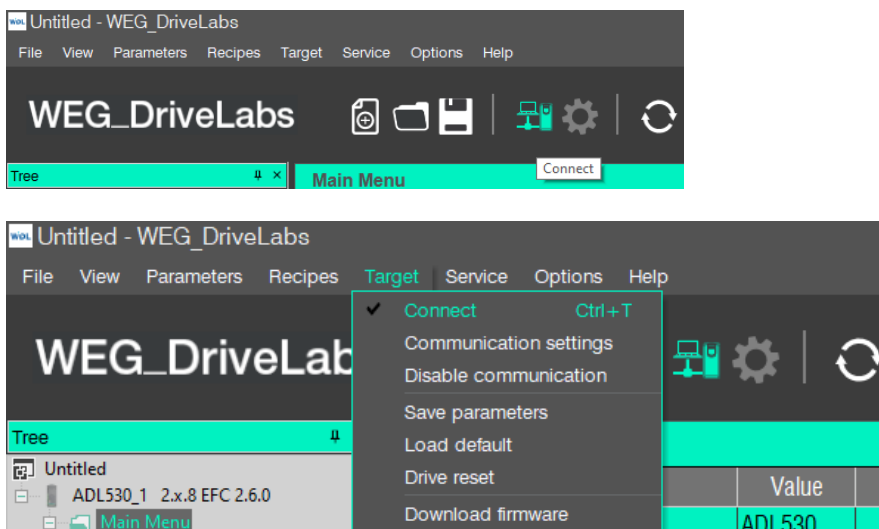
- the GENERAL section contains readout information regarding the name and FW version for the product and application
The COMMUNICATION section is used to configure the communication protocol. The user can directly set the values for the parameters to be used to initiate data exchange with the device.

After entering the values for the various parameters, press “OK” to confirm.

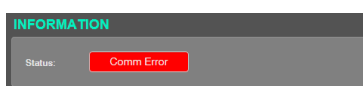


- The Status field provides information regarding communication status (Offline-Online)

At this point, pressing the Connect icon (or using the Connect command from the drop-down menu under Target), the configurator starts exchanging data with the connected device.



If the target does not meet all the parameters set, an error status is displayed:

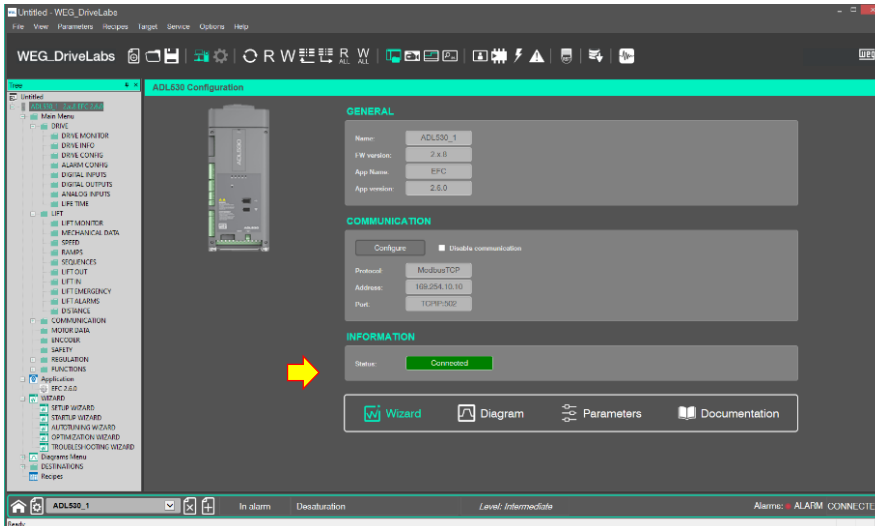


5.2 Commissioning with the Wizard tool

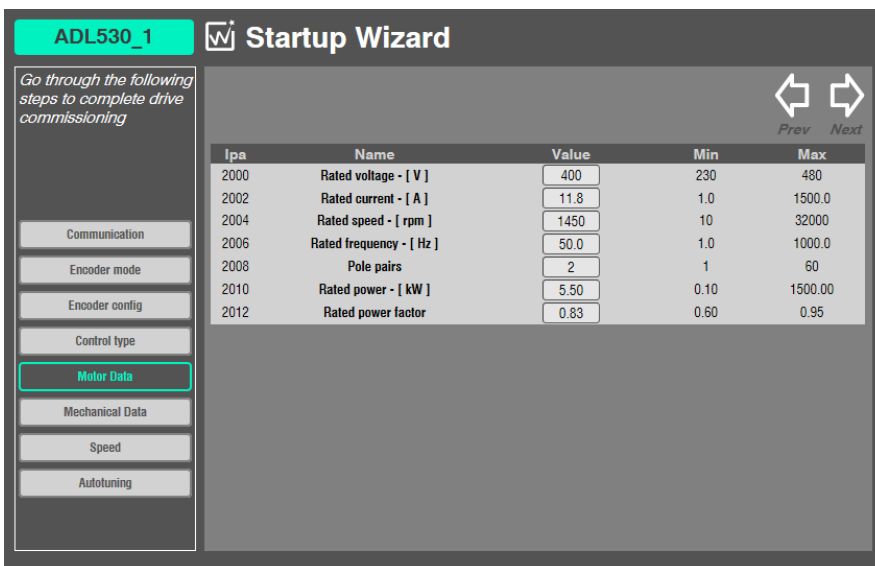


Avvertenza!

Before using the product, carefully read the section containing the safety instructions for the device used.



Following the step-by-step procedure from this menu, the inverter can, for example, be started up by setting the main parameters relating to communication, feedback, motor, main system mechanical data, motor speed and auto-tuning.



The user can directly set the value of the set of parameters using the drop-down menus, then press Next to move on to the next step.

5.2.1 Optimization Wizard

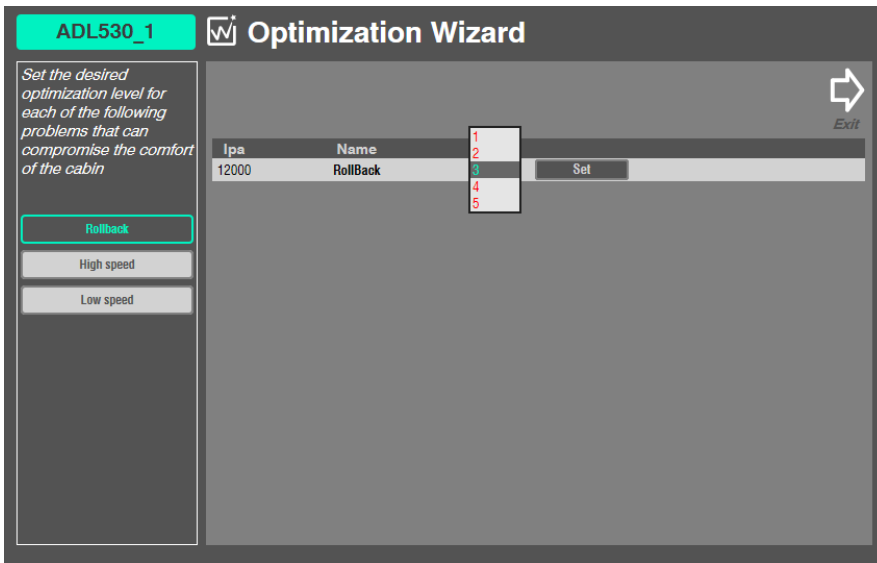
Through this menu it is possible to immediately optimize the control response in order to maximise cabin comfort.

From three to five levels of optimization are available for each of the parameters:

- 1 (basic level pre-selected as default level)
- 2 (intermediate optimization level)
- 3 (intermediate optimization level)

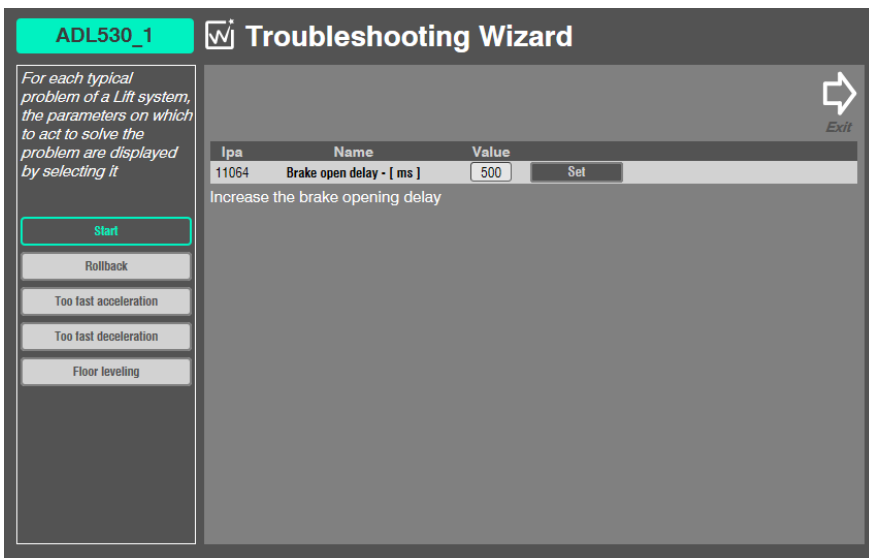
- 4 (high optimization level)
- 5 (very high optimization level)

To avoid possible vibrations, the optimization level should not be increased if not necessary.



5.2.2 Troubleshooting Wizard

For each problem typical of a Lift System, selecting the relevant action displays the parameters for the drive on which the problem needs to be solved.

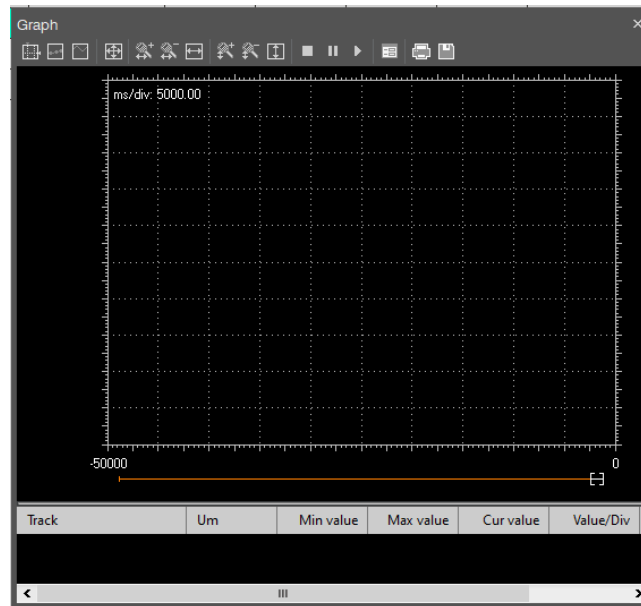


5.3 Show Graph

Built-in Tool to display the evolution in the value traces for a set of variables previously saved in .OSC or .OSCX (Oscilloscope XML file) formats. Since it is an asynchronous tool, it cannot guarantee sample synchronisation.

The graphics window consists of three elements:

- Toolbar
- Graph area: variable curve, vertical cursors identifying two distinct lines, Scrollbar to change the scale of the x-axis and scroll back and forth along the horizontal axis.
- List and information regarding the variables, each identified with a different colour.



Note!

All toolbar commands are disabled if no variable has been added to the Graph.

To open a session previously saved to the PC (select Service / Offline Graph Viewer).

A maximum of 8 traces can be displayed simultaneously.

Each trace has a maximum number of samples (identical for all parameters); this can be set from a minimum of 500 to a maximum of 100000.

Once this limit is reached, no further traces can be added without deleting existing ones.

Graph settings can be made by clicking on the "Graph settings" icon.

Adding parameters

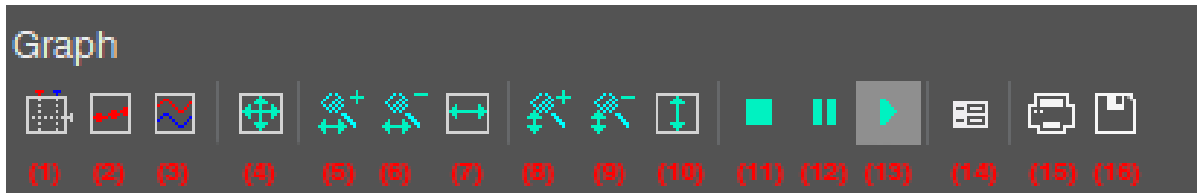
When the WEG_DriveLabs is connected, parameters to be displayed can be added by dragging them from the parameter grid in the graphics window.

Once released, the parameter is added to the parameter traces to be monitored and queued in the variable list.

Removing parameters

To remove a parameter trace, select it in the list and press **Del** on the keyboard.

Control of data acquisition and display



The graph includes a toolbar with several commands to control the acquisition process and how the data is to be displayed.

Starting and stopping data acquisition

When a parameter is added to the graph, data acquisition starts immediately.

Pause acquisition (12)

Interrupts acquisition. The curve freezes (while the data acquisition process is still running in the background),

Restart acquisition (13)

Resumes data acquisition

Stop acquisition (11)

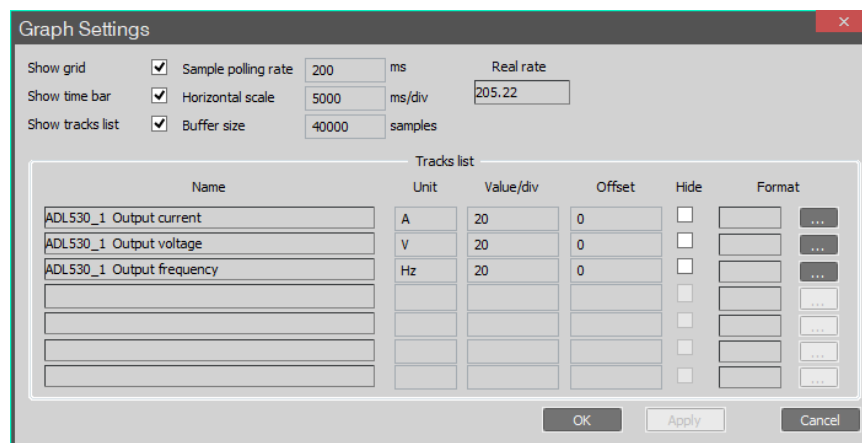
Stops acquisition. In this case, clicking on *Restart acquisition* starts tracing parameter evolution from zero.

Setting the axis scale

At start-up, the configurator applies a default scale to the axes.

To set a different scale:

1. Click on **Graph settings (14)**
2. Set the scale for the horizontal axis, common to all traces



3. For the vertical axis, a separate scale can be specified for each variable
4. Confirm the new settings. The graph adapts to the new scale

It is also possible to:

- zoom in and out on horizontal (5) (6) and vertical (8) (9) axes
- Quickly adjust the scale of the horizontal axis, the vertical axis, or both (to include all samples); this is done by clicking on the corresponding toolbar item.

Vertical split

To split the traces for two or more variables, click on **Vertical split (3)** in the toolbar.

Displaying samples

Clicking on **Show acquisition** (2) in the toolbar highlights the individual values measured during data acquisition.

Click on the same item again to go back.

Detecting measurements

Show measure bars (1) opens / closes two measure bars used to capture some measurements on the graph. To measure a time interval between two events, move one bar to the point on the graph corresponding to the first event and the other bar to the point corresponding to the second event.

The time interval between the two bars is shown in the top left-hand corner of the graph.

To read the value of all the variables in the graph at a given time, move the bar to the point on the graph corresponding to the time to be observed.

Graph settings

To customise the appearance of the graph, click on **Graph Settings** (14) and select or deselect the items present.

Changing the sampling time (polling)

The configurator periodically sends queries to the target device to read the data to be traced on the graph. The polling frequency can be configured by following this procedure:

1. Click on **Graph Settings** (14)
2. In the window, change the "Sample polling rate".
3. Click OK to confirm.

Note!

The actual polling frequency depends on target device performance (in particular, performance of the communication task). The actual value can be read in the graph settings window.

Saving data to a file

Captured samples can be saved to a file for further analysis with other instruments or to be reopened later:

1. Acquisition may need to be stopped before the data is saved to a file.
2. Click **Save acquisition to file** (16)
3. Choose the output file format: OSC is a simple text file containing the time and value for each sample; OSCX is an XML file, which includes more complete information that can be further analysed with another instrument (SoftScope).
4. Set the file name and destination directory, then confirm the operation

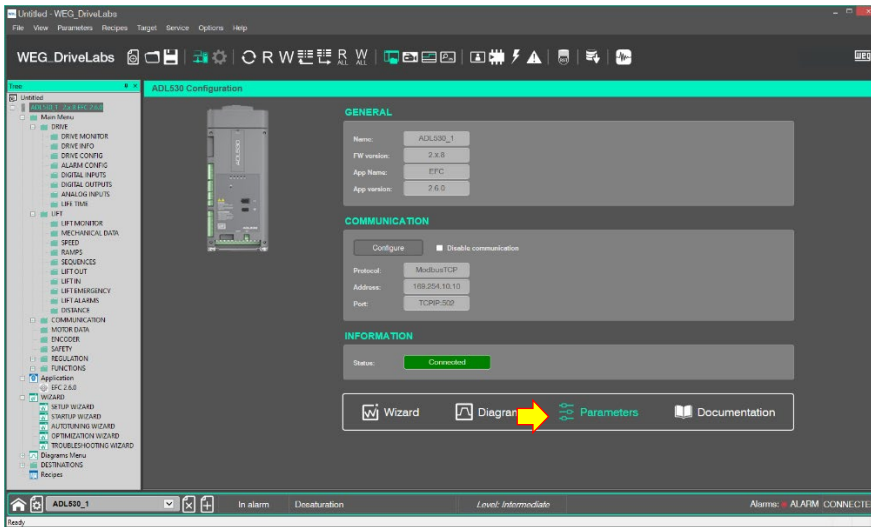
Printing the graph

Follow this procedure to print a view of the graph:

1. Suspend or interrupt acquisition
2. Move the scroll bar and adjust the zoom so that the view includes the items to be printed
3. Click **Print Graph** (15)

6 Parameter file

Once the WEG_DriveLabs work session has been started, clicking on Parameters opens the parameter file for the selected product.



The screenshot shows the 'DRIVE MONITOR' window in WEG_DriveLabs. It displays a table of parameters with columns: IPA, Name, Value, Um, Type, Default, Mn, Max, and Description. The table lists various drive parameters such as Output current, Output voltage, Output frequency, Speed setpoint, Motor speed, DC link voltage, Heatsink temperature, Torque current, Magnet current, Motor overload, Drive overload, Bres overload, Enable state mon, Start state mon, FastStop state mon, Torque, Dig input mon, and Digital output mon.

IPA	Name	Value	Um	Type	Default	Mn	Max	Description
250 *	Output current	0.0	A	float	---	---	---	Output current
252 *	Output voltage	0	V	float	---	---	---	Output voltage
254 *	Output frequency	0.0	Hz	float	---	---	---	Output frequency
664 *	Speed setpoint	0	rpm	short	---	---	---	Speed setpoint
260 *	Motor speed	0.00	rpm	float	---	---	---	Motor speed
270 *	DC link voltage	0	V	float	---	---	---	DC link voltage
272 *	Heatsink temperature	0.00	degC	float	---	---	---	Heatsink temperature
284 *	Torque current	0.0	A	float	---	---	---	Torque current
286 *	Magnet current	0.0	A	float	---	---	---	Magnet current
3212 *	Motor overload	0	%	unsignedSh	---	---	---	Motor overload accum
368 *	Drive overload	0	%	unsignedSh	---	---	---	Drive overload accum
3260 *	Bres overload	0	%	unsignedSh	---	---	---	Bres overload accum
1066 *	Enable state mon	0		unsignedSh	---	---	---	Enable state mon
1068 *	Start state mon	0		unsignedSh	---	---	---	Start state mon
1070 *	FastStop state mon	0		unsignedSh	---	---	---	FastStop state mon
2388 *	Torque	0.0	%	float	---	---	---	Torque
1200 *	Dig input mon	000000000		unsignedSh	---	---	---	Digital input mon
1400 *	Digital output mon	0000		unsignedSh	---	---	---	Digital output mon

The information associated with the parameters can be displayed. Each parameter is defined by the following fields:

- IPA: the parameter identifier.
- Name: a mnemonic name used to identify the parameter.
- Value: the current value of the parameter.
- Um: unit of measure for the parameter value.
- Type: the parameter data type (e.g.: int, enum...).
- Default: the default value for the parameter.
- Min: minimum value associated with the parameter.
- Max: maximum value associated with the parameter.
- Description: an explicit description of the parameter.

WEG_DriveLabs parameters are organised in various menus, making it possible to display the complete list or a subset of the parameters.

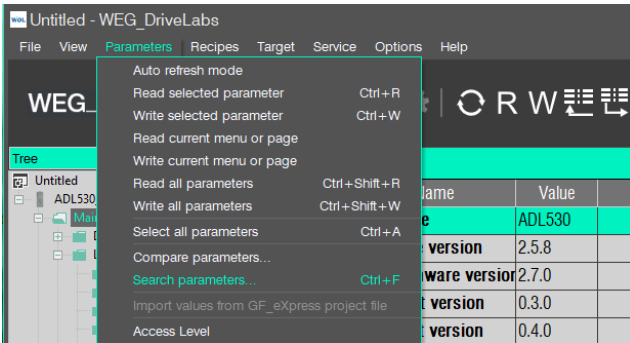
The user can only edit the value of parameters for which writing is enabled.

Read-only parameters are recognised by the “*” marker beside the parameter IPA (figure above). These parameters are called variables. Variables cannot be edited or written.

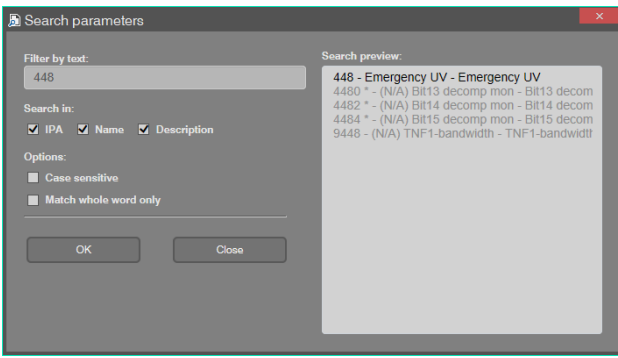
If one or more parameters have been changed and you wish to close the work session, WEG_DriveLabs automatically prompts you to save the configuration in a gfl file.

6.1 Search parameter function

From the Parameters drop-down menu.

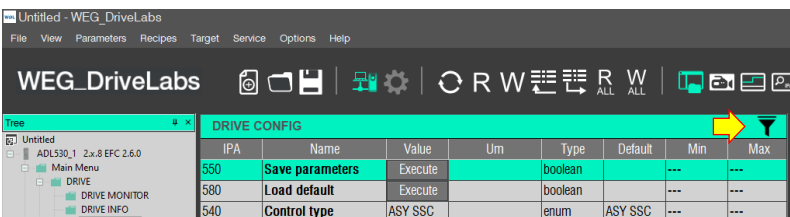


The Search parameter function makes it possible to search all menus for one or more parameters that meet the set selection criteria: IPA, Name, Description, partial fields are also allowed.

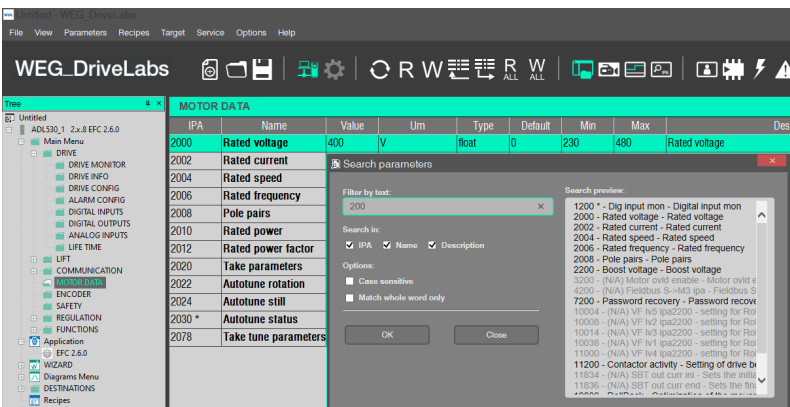


6.2 Filter parameter function

To enable this function, click on the icon shown below:



The Filter parameter function enables the search for one or more parameters that meet the set selection criteria but only in the open menu: IPA, Name, Description, partial fields are also allowed.



6.3 Parameter management

Parameter value

When the value of a parameter is not updated with the value of the device, it is displayed in red.

It is assumed that the parameters are not updated when:

- following an “Open” operation, as soon as it is loaded
- the user edits a value

It is assumed that the value is updated following a read or write operation.

Edit the parameter value

A value can be changed by:

- *Directly writing a new value (Value field)*

1604	Analog inp 1 scale	2.00	←	float	1.00	-10.00	10.00	Analog inp 1 scale
------	--------------------	------	---	-------	------	--------	-------	--------------------

- *Selecting it from a drop-down menu (Value field)*

1410	Dig output 1 src	Dig input 2x mon		enum	Null			Dig output 1 src
1412	Dig output 2 src	Dig input 2x mon		enum	Null			Dig output 2 src
1414	Dig output 3 src	Dig input 3x mon		enum	Null			Dig output 3 src
1416	Dig output 4 src	Dig input 4x mon		enum	Null			Dig output 4 src
1420	Dig output 1x src	Drive OK		enum	Null			Dig output 1x src
1422	Dig output 2x src	Drive ready		enum	Null			Dig output 2x src
1430	Dig out 1 inversion	Ref is 0		boolean	OFF	0	1	Digital output 1 inv
1432	Dig out 2 inversion	Ref is 0 delay		boolean	OFF	0	1	Digital output 2 inv

6.4 Read and write commands

The screenshot shows the WEG_DriveLabs software interface. A menu is open over the 'Parameters' tab, listing various actions like 'Auto refresh mode', 'Read selected parameter', 'Write selected parameter', etc. In the background, a table displays parameter details:

Name	Value
ADL530	ADL530
version	2.5.8
ware version	2.7.0
version	0.3.0
version	0.4.0
Application name	EFC

To send a value for a given parameter to the device, the user can use the “Write selected parameter” command or the **W** icon.

The user can also read the current parameter value directly from the device using the “Read selected parameter” command or the **R** icon.

The read and write commands refer to the parameter currently selected in the WEG_DriveLabs grid.

It is also possible to read and write all parameters or a set of parameters using the following commands: “Read all parameters” command or **R ALL** icon, “Read current menu or page”, “Write all parameters” command or **W ALL** icon or “Write current menu or page”.

Using the “Import values from WEG_eXpress project files” command, the default values contained in the parameters file of a project saved with the WEG_eXpress configurator can be imported into WEG_DriveLabs (only for supported devices).

Connected, Auto-refresh and Off-line modes

To set configurator in Connected mode:

- “Connect” command on the Toolbar,
- Target / Connect menu
- “CTRL + T” short-cut.



When Connected mode is active, the configurator starts communicating with the devices using the communication settings specified. Cyclic polling of a specific parameter is used to determine whether the device/devices is/are actually connected.

If one of the devices cannot be reached, the connected mode still remains active and continues polling the devices, but the connection status indicates ERROR.

When all targets respond correctly to polling requests, the connection status indicates CONNECTED.



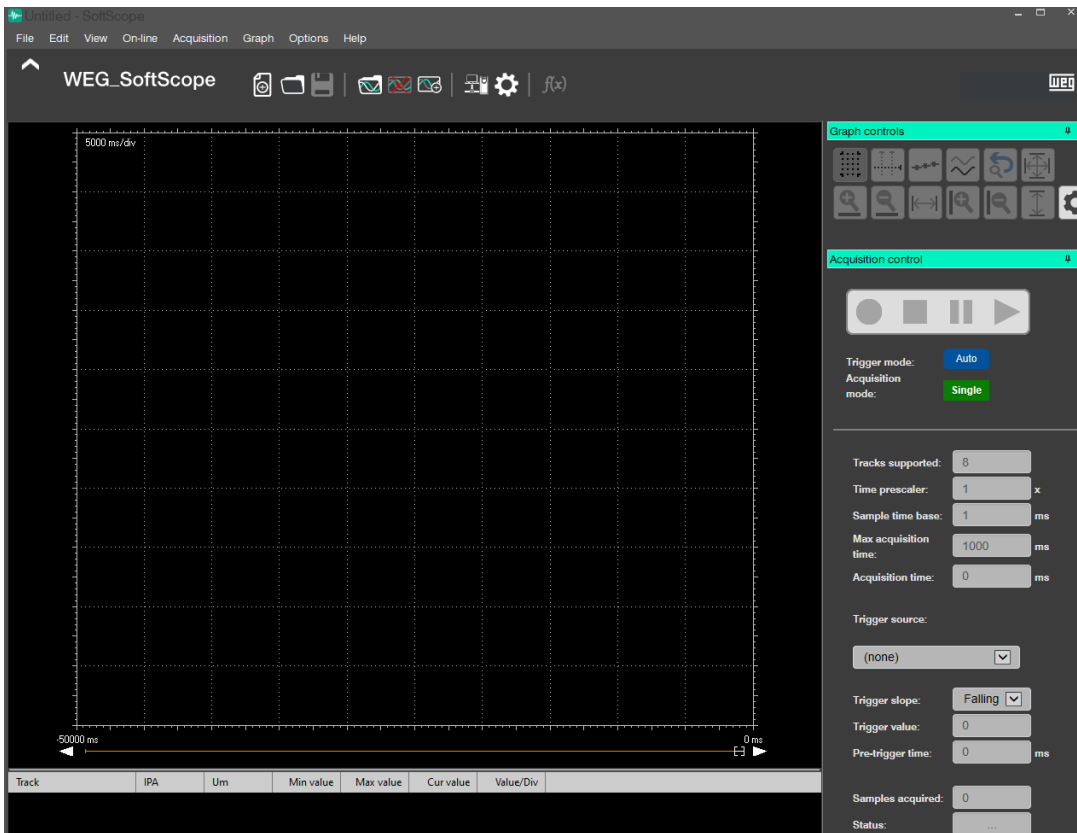
Auto-refresh mode enables WEG_DriveLabs to update the value of each parameter shown in the active window (and only those values). Likewise, the parameter is immediately sent to the device whenever the user edits the value of the parameter selected in the grid.

WEG_DriveLabs can also operate in Off-line mode.

This makes it possible to create, configure or edit a Project without being connected to the device/devices.

7 Softscope Real time

Built-in oscilloscope for synchronous sampling at 1ms intervals, fit with the configuration software. See the specific manual



User Manual

Description:

WEG_DriveLabs PC Configurator

Revision: 0.2

Date: 23-1-2023

Code:

WEG Automation Europe S.r.l.

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