

PLC-ANALYZER pro 6

PLC-Logic analysis in no time

Driver Addendum



QB

MW



Driver

Videotrack module

AUTEM
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PLC-ANALYZER pro 6 - Driver Addendum

Video track module

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Signal source

Video track

This driver addendum describes the particularities of the following PLC drivers and gives you hints on using them.

- Video track

With this driver video tracks of IP/GigE Vision/USB cameras can be recorded synchronously to the PLC signal acquisition. This is a great help for error analysis on machines and plants, because the video image allows the mechanical situation to be viewed synchronously with the process data.

The PLC signals and the video image can easily be displayed in two windows next to each other. The video window shows exactly the image which corresponds to the time of the signal cursor position in the signal window. If the signal cursor is moved, the video image changes analogously.

It is important that you read through the driver addendum before using a PLC driver. Please pay attention to the WARNINGS that advise you on possible dangers when using PLC-ANALYZER pro.



WARNING

Errors that may occur in the automated facility, endangering humans or causing large-scale material damage, must be prevented by additional precautions. These precautions (e.g. independent limit monitors, mechanical interlocks) must guarantee safe operation, even in case of dangerous errors.

Installation

The Video track module signal source can be added to the project as a new signal source. If the video track module is not yet in the list of available signal sources, you must first activate the license for video track module with the AUTEM LicenseManager on your computer.

Installing additional hardware

The video track module captures images from a connected camera. Connect an IP, GigE Vision or USB camera to your computer.

Installing additional software

To use the video track modul, a camera must be connected to your computer. You may need to install a driver for the camera.

Configuration

Open driver settings to set important parameters for data recording. If you have added the driver to the project several times, you can set the properties individually for each individual driver.

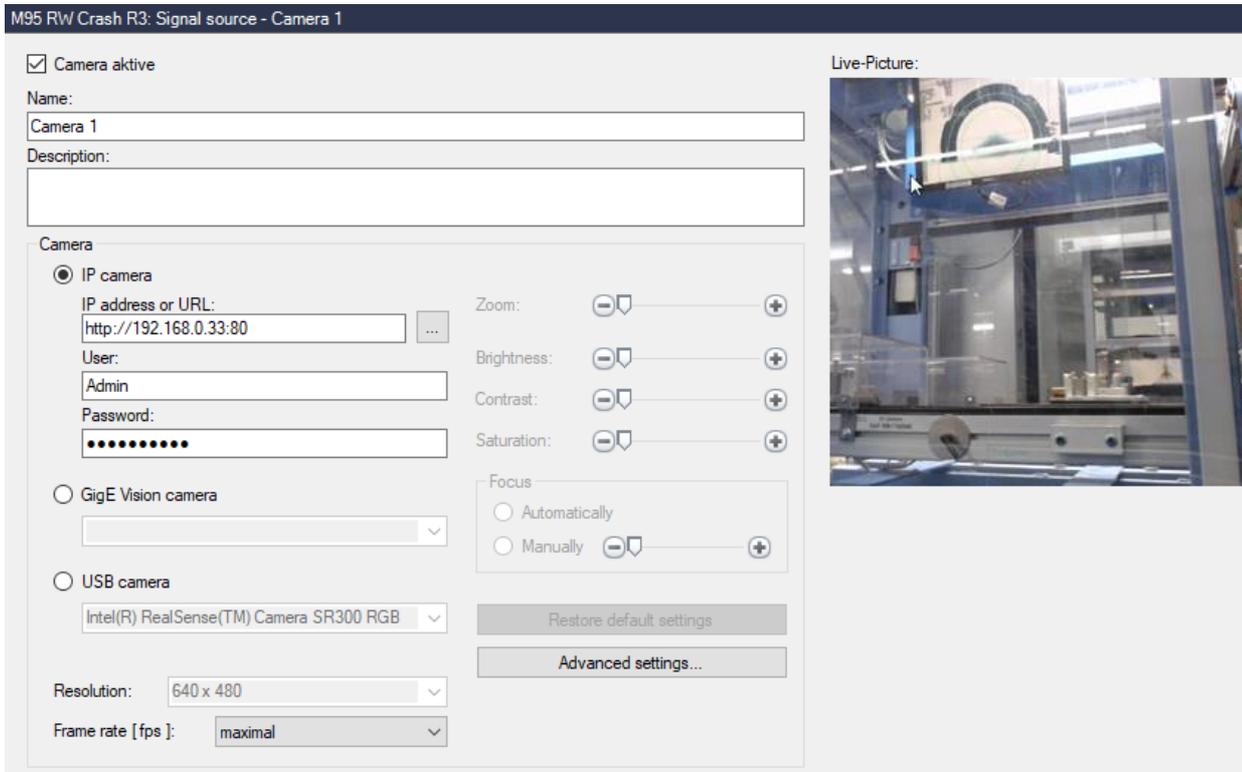


Fig. 1-1 Settings Video track

First enter a meaningful name and assign any description to it.

Under *Camera*, select which camera you want to use for recording:

- **IP camera:**

Enter the *IP address or URL* and enter the *User* and *Password* if the camera is access protected. Use  to customize the URL.

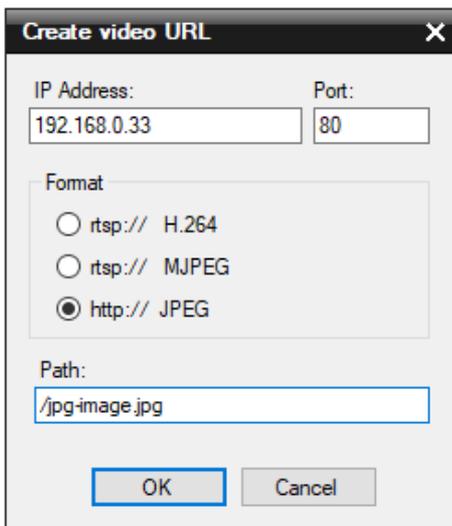


Fig. 1-2 Customize Video-URL

Select the *Format* of the communication and add the *Path*. The appropriate parameters can be found in the settings or in the description of your IP camera.

- **GigE Vision camera:**

Select an installed and configured GigE Vision camera.

If no GigE Vision camera is installed yet, start the "GenICamBrowser" program after installing the **Common Vision Blox Camera Suite**.

Under *Available Devices* you will find the connected GigE Vision camera. If there is no camera in the list, start the search with the loupe.

Then use + to add the camera to the *Configured Devices* list.

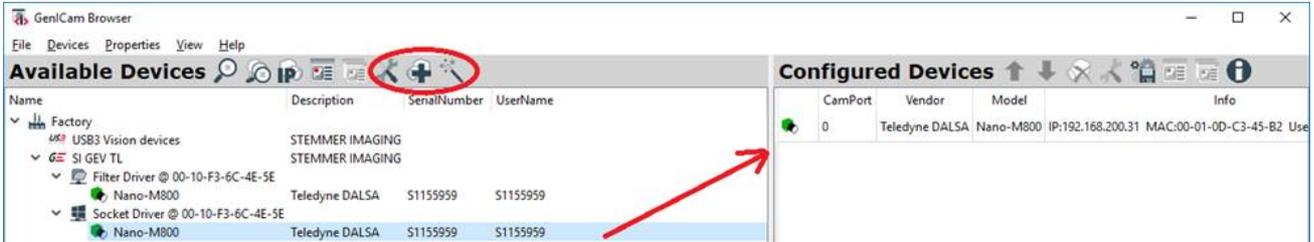


Fig. 1-3 GenICamBrowser - Available Devices

In *Configured Devices*, select the camera and click on the circled icon:

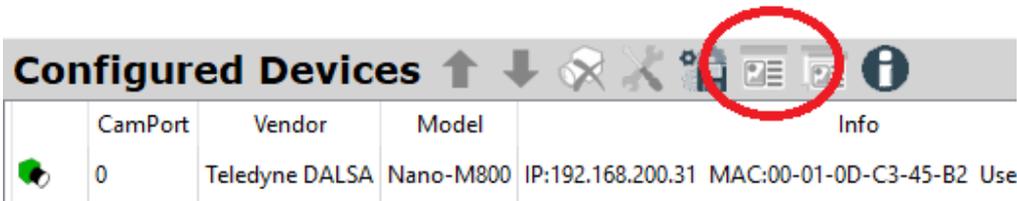


Fig. 1-4 GenICamBrowser - Configured Devices

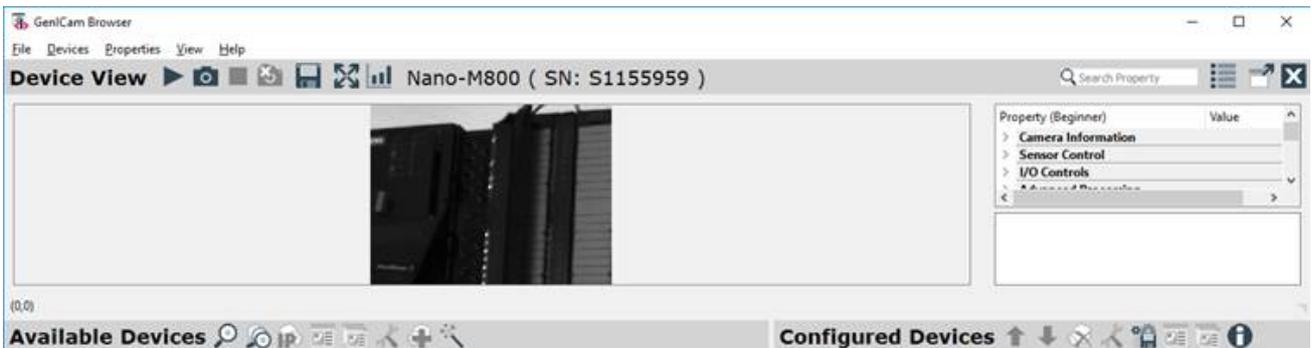


Fig. 1-5 GenICamBrowser - Device View

Under *Device View* you can see now images of the camera. Close the browser and save the settings.

- **USB camera:**

Select an installed USB camera.

Select the desired *Resolution* and *Frame rate [fps]*. Adjust the *Zoom*, *Brightness*, *Contrast*, and *Saturation*. Select whether to adjust the focus of the camera *automatically* or *manually*.

Click *Restore default settings* to reset all settings to the default values. Selecting the *Advanced settings* button displays a special options window of the connected camera where you can make additional settings.



NOTE

The connected cameras do not always support all settings. Depending on the type of camera connected, some settings may be disabled.

Data acquisition

After configuration, a video window is automatically created in which the camera images are displayed during recording. The assignment of the cameras contained in the project to the video windows can be done via the settings of the signal window.

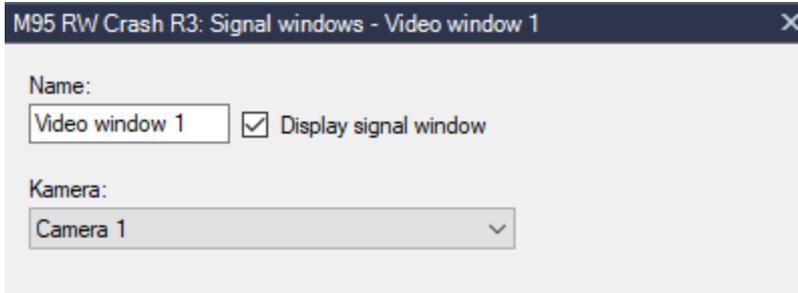


Fig. 1-6 Settings Video window

After the video track is added, a video file is added to the project in which the image data is saved during recording. Open the video file settings to set the *Location*, *File name*, and *Acquisition mode*.

Supported Cameras

The video track module supports all common USB and IP cameras. It also supports GigE Vision cameras supported by the Common Vision Blox Camera Suite.

Time behaviour and particularities

The time interval between the image transmissions from the camera depend on the camera type, the set resolution and the set frame rate [fps].

For normal USB cameras, the frame rate is 30 fps, while GigE Vision cameras can deliver several 100 frames per second.



NOTE

Recording video data generates very large amounts of data (several GB per hour). We recommend the use of a trigger-controlled video recording in order to limit the recording to the period around the event of interest and thus to reduce the amount of data considerably.