

**PlugIn-Concept –
Open To Everything**



IPeMotion PlugIn WAGO

User manual

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2 General information

2.1 About this manual

The manual *IPEmotion PlugIn WAGO* describes the structure of the PlugIn and how to use the features for recording signals in IPEmotion.

Please read the manual *IPEmotion PlugIn WAGO* carefully to get to know the operating and to learn more about the functions and special features. This manual also contains information for installing and removing the software.

2.2 Version

2.2.1 Manual IPEmotion PlugIn WAGO

This manual has the version number 01.00.

2.2.2 IPEmotion PlugIn WAGO

The descriptions in this documentation refer to the current release with the version number 01.00.

2.2.3 IPEmotion

The descriptions in this documentation refer to the current release with the version number 01.03.



The PlugIn requires at least IPEmotion V01.02 on your computer.

2.3 Legend of the used icons



Tip

This icon indicates a useful tip that facilitates the application of the software.



Information

This icon indicates additional information for a better understanding.



Attention!

This icon indicates important information to avoid potential error messages.

2.4 Support

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Technical support and product information

www.ipetronik.com e-mail: support@ipetronik.com

2.5 Related documentations

2.5.1 IPEmotion

The documentation IPEmotion.pdf provides you with a description and useful information related to IPEmotion. This documentation is stored in the following standard language dependent directory: C:\Programs\IPETRONIK\IPEmotion Vxx.xx.xx\Help.




2.5.2 Manual MAL development



The documentation MAL development.pdf provides you with a description and useful information related to the use of the interface with plug-in components and IPEmotion.

2.6 Documentation feedback

At IPETRONIK, the technical publications team strives to produce documentations of the highest quality and values your feedback as a reader and user. If you have any comments or suggestions regarding our product manuals, contact us under support@ipetronik.com.

Please inform us about the following points:


-  Version number,
-  Name of the guide,
-  Page number or section title,


-  Brief description of the content (e.g. inaccurate instructions, grammatical errors, or information that require clarification),
-  Any suggestions for a general documentation improvement.


3 Introduction

The Wago PlugIn offers you the ability to connect I/O terminal systems to the IPETRONIK software IPEmotion and to record measuring data within IPEmotion. The systems are connected by direct accesses to the process image of the corresponding coupler via TCP/IP (Modbus). There is also the possibility to connect the bus couplers by using Profibus. Please find further information in the corresponding IPETRONIK documentation PROFIBUS.

The current version includes the following types of bus couplers:

 750-341

 750-342

 750-352

Below this systems, the following type-dependent terminals can be created:

 Digital inputs

 Digital outputs

 Analog inputs

 Analog outputs

 Special terminals

A process image consists of various terminals. The current version only realizes a selection of terminal types. The terminals KL1xxx, KL2xxx, KL3xxx, and KL4xxx show the not directly supported terminals of the different types in order to provide them for use.

4 Setting up and removing


4.1 System requirements

The minimum hardware and software requirements for the application of the Wago PlugIn are outlined below.

4.1.1 Hardware



The minimum hardware requirements correspond to those of IPEmotion.

The following additional hardware is required:

-  I/O terminal system

4.1.2 Platforms

The Wago PlugIn can be run under the following operating systems:

-  Windows XP (32 Bit),
-  Windows Vista (32 Bit).

4.1.3 Software

The Wago PlugIn requires the following software:

-  minimum IPEmotion V01.02

4.2 Installing the Wago-PlugIn

The following chapter guides you through the installation process of the Wago PlugIn.



The Wago PlugIn needs administrator rights during the installation. For working with the PlugIn you need at least limited user's or default user's rights (Vista).

The installation of the Wago-PlugIn is based on an installation wizard that guides you through the setup process step by step. You can start the installation wizard from the USB flash drive, the product CD or, if you have downloaded the setup program, from the setup file itself.

To install the Wago-PlugIn:

1. Start the installation wizard from the USB flash drive or from the setup file.



USB flash drive: Connect the USB flash drive to the USB port of your computer and follow the instructions of the installation wizard.



Product CD: Launch the product CD and click **Install Software** on the Welcome screen. On the **Install Software** screen, click **Install IPEmotion PlugIn WAGO** to start the installation wizard.



Setup file: Browse the location of the setup file and double-click **IPEmotion PlugIn WAGO.exe** to start the installation wizard.



*Depending on the used PC operating system, a security warning appears. Click **Run** to start the installation wizard.*

2. Welcome screen:

Click **Next** to continue.

3. Destination folder:



Due to the security model of Microsoft Corporation related to .NET applications, the installation of the Wago-PlugIn on a local drive is recommended.



According to the Microsoft conformance guidelines for Windows applications the files are installed to the default locations that are specific to the operating system and language.

Accept the default installation location for the Wago-PlugIn. To select another location click **Change**.

After you have specified the location for the installation, click **OK** to return to the **Destination folder** screen.

Click **Next** to continue.

4. Ready to install the program: The Wago-PlugIn is ready to be installed.

Click **Install** to start the installation.

5. Installing: A progress bar is shown during the installation process.

6. InstallShield Wizard Completed: After the successful installation, click **Finish** to exit the installation wizard.



Due to the fact that the Wago-PlugIn installation file is an exe standard setup file, user-specific parameter configurations can be made with a silent installation, e.g. options for installation, indication, repair.

4.3 Uninstalling the Wago-PlugIn

The following chapter shows the deinstallation process of the Wago-PlugIn.

For removing the Wago-PlugIn you have the following possibility:

-  With the option **Add or Remove Programs** for the Wago-PlugIn in the Control Panel.

With this method you can remove files, folders and registry entries from your computer, which has been created during the installation.

Removing the Wago-PlugIn with the deinstallation function of the Control Panel

To do so, proceed as follows:

1. Click in the menu **Start** on your computer on **Settings** and then **Control Panel**.
2. Double-click in the **Control Panel** on **Add or Remove Programs**.
3. Select from the program list the entry **IPEmotion PlugIn WAGO** and click **Remove** to start the installation wizard.
4. Click **Yes** to start the deinstallation.
5. A progress bar is shown during the uninstalling process.

5 Working with the Wago-PlugIn

The following chapter offers an overview of the available commands and their functions. In addition, it is shown how to use the software IPEmotion for configuring and acquiring data, as well as, managing and analyzing the acquired data.


5.1 Configuring the system and channels

The main navigation tab **Signals** contains all available and connected systems with the respective type description and channels. By using the *Hardware* button, you can select the used hardware (Wago). Click on the button *Add system* or *Add component* to expand the configuration by further systems or components.

For recording a signal, you have to **activate** the desired **channels** in the channel view and **define** the following **parameters**:

 Connection parameters


To define the used **connection parameters** for the signals, proceed as follows:

 Please find detailed information about the functionality and meaning of the following IPEmotion parameters in the IPETRONIK documentation IPEmotion: General.

Systems			Name	Active	Unit	Phys Min	Phys Max	Sensor Min	Sensor Max	Sampling rate
Name	Type	Σ		<input type="checkbox"/>						
750-341		5								
Digital input terminal		2	DIN-1	<input type="checkbox"/>		0	1	0	1	10 Hz
KL2xxx		1	DIN-2	<input type="checkbox"/>		0	1	0	1	10 Hz
Analog input terminal		1	DOUT-1	<input type="checkbox"/>		0	1	0	1	10 Hz
Analog output terminal		1	AIN-1	<input type="checkbox"/>		-32678,0	32767,0	-32678	32767	10 Hz
750-342		0	AOUT-1	<input type="checkbox"/>		-32768	32767	-32768	32767	10 Hz
750-352		0								


General Connection parameters

IP address: 0.0.0.0

 Select in the left tree view the desired system. You can find the **Connection parameters** tab in the window of the configuration dialog.

 IP address

To define the **channel parameters** for the signals, proceed as follows:

 The channel configuration takes place according to the IPEmotion channels. There are no specific settings required.

Please find detailed information about the functionality and meaning of the IPEmotion parameters in the IPETRONIK documentation IPEmotion.



The maximum sampling rate of 1 kHz is identical for all coupler channels because it is a matter of a process image. All terminals are accordingly read with this sampling rate.

At initializing, the addresses of the selected channels are checked if they are available at the used couplers. In addition, the size of the process image of the coupler is compared with the configured size and the status register is controlled for errors (configuration errors, internal bus errors). If the channels are not available, incorrect or out of the process image, they are set to the error status and an error text will be attached.