IPETRONIK

IPEMOTION
Software

IPEmotion_PlugIn_WAGO_V01_03_01

30. November 2017

Table of Contents

1 Important and general information

1.1 Important information

Please follow these instructions before and during the use and application on any IPETRONIK product!

1.1.1 Safety and Warning instructions

Please follow the instructions **and** information as contained in the user manual!

1. The user can **influence an electronic system by applying the IPETRONIK product**. This might cause risk of personal injury or property damages.
2. The **use and application of the IPETRONIK product is permitted only to qualified professional staff**, as well as, only in appropriate manner and in the designated use.
3. **Before using an IPETRONIK measurement system** in the vehicle it **has to be verified** that **no function of the vehicle, which is relevant for secure operation, might be influenced**:
   - by the installation of the IPETRONIK measurement system in the vehicle,
   - by an potential malfunction of the IPETRONIK system during the test drive.

   In order to avoid possible danger or personal injury and property damages, appropriate actions are to be taken; such actions have to bring the entire system into a secured condition (e.g. by using a system for emergency stop, an emergency operation, monitoring of critical values).

   Please check the following points to avoid errors:

   - Adaption of sensors to components of the electrical system / electronics, brake system, engine and transmission control, chassis, body.
   - Tap of one or several bus systems (CAN, LIN, ETHERNET) including the required electrical connection(s) for data acquisition.
   - Communication with the vehicle's control units (ECUs), especially with such of the brake system and/or of the engine and transmission control (power train control system).
   - Installation of components for remote data transmission (mobiles, GSM/GPRS modems, WiFi and Bluetooth components).

The products can be operated in extended temperature ranges greater $70\,^{\circ}\mathrm{C}$ and therefore the operator has to take safety measures to avoid any skin burnings on hot surfaces while touching the products.

4. **Before** directly or indirectly using **the data acquired by an IPETRONIK measurement system to calibrate control units, please review the data regarding to plausibility**.
5. With regard to the application of IPETRONIK products in vehicles during use on public roads the manufacturer and/or registered user of the vehicle **has to ensure that all changes/modifications have no influence concerning the license of the vehicle or its license of operation.**
6. **User does agree to the instructions and regulations as mentioned above.** In case the user does not agree with the instructions and regulations as mentioned above, he has to notify this expressly and immediately in writing to IPETRONIK before confirming the sales contract.

1.2 Terms and conditions

See IPETRONIK website for details: https://www.ipetronik.com/

1.2.1 Legend of 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.*

1.2.2 Support

Headquarter:

IPETRONIK GmbH & Co. KG
Im Rollfeld 28
76532 Baden-Baden, Germany
Phone +49 7221 9922 0
Fax +49 7221 9922 100
info@ipetronik.com
www.ipetronik.com
Limited commercial partnership with its head office in Baden-Baden, registry court HRA No. 201313
IPETRONIK Verwaltungs-GmbH Baden-Baden is an individually liable society, registry court Mannheim HRB No. 202089
CEOs: A. Wocke, C. Buchholz

Technical support and product information
www.ipetronik.com e-mail: support@ipetronik.com

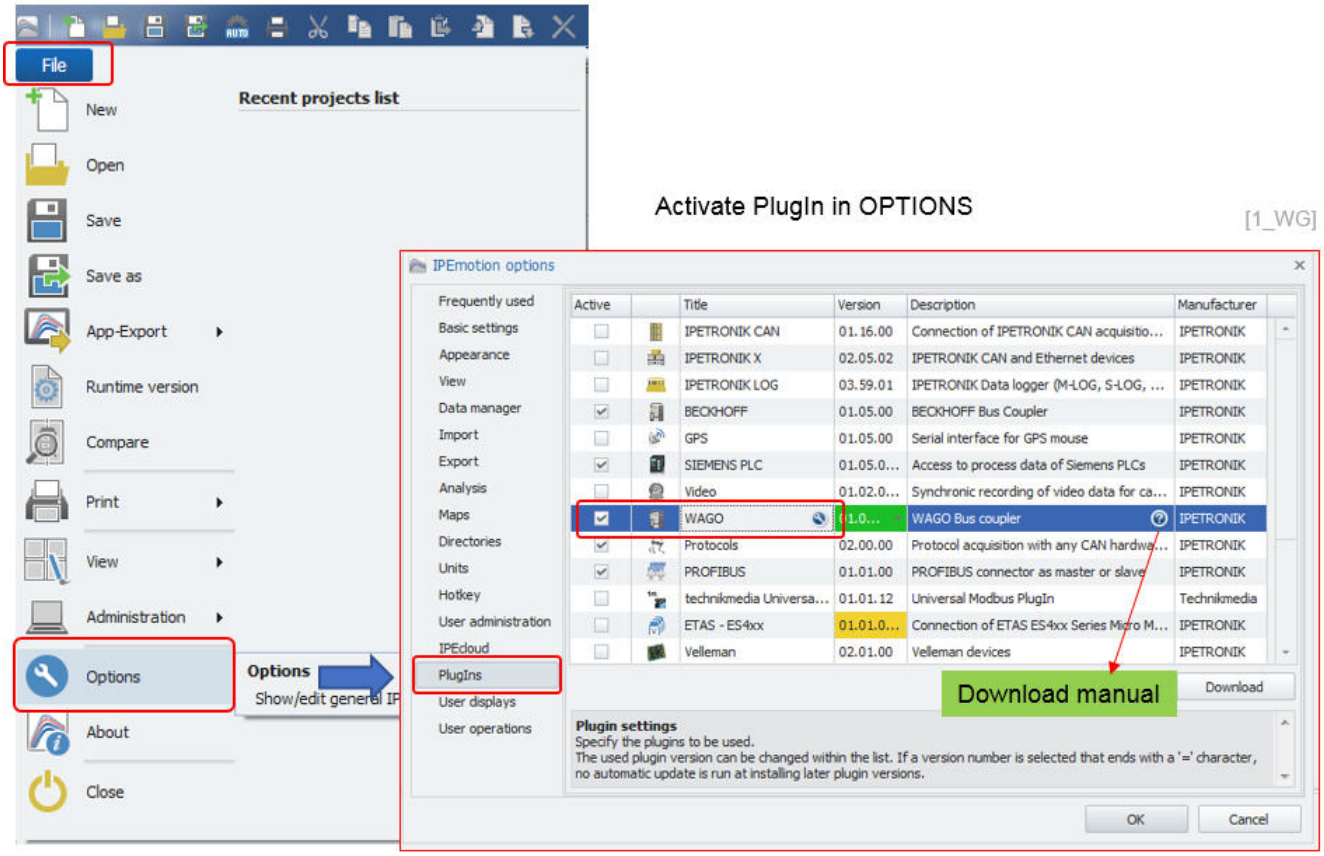
2 PlugIn overview

2.1 PlugIn description

With the WAGO PlugIn you can access Modbus couplers and configure the supported IO terminals.

2.2 PlugIn installation

In order to use the PlugIn together with IPEmotion you need to install it. The PlugIn is available for download from the IPETRONIK website: https://www.ipetronik.com/ When you have installed the PlugIn, you need to launch the IPEmotion software. Then you need to access the application menu and open the OPTIONS. In the OPTIONS you can activate the PlugIn as indicated below.



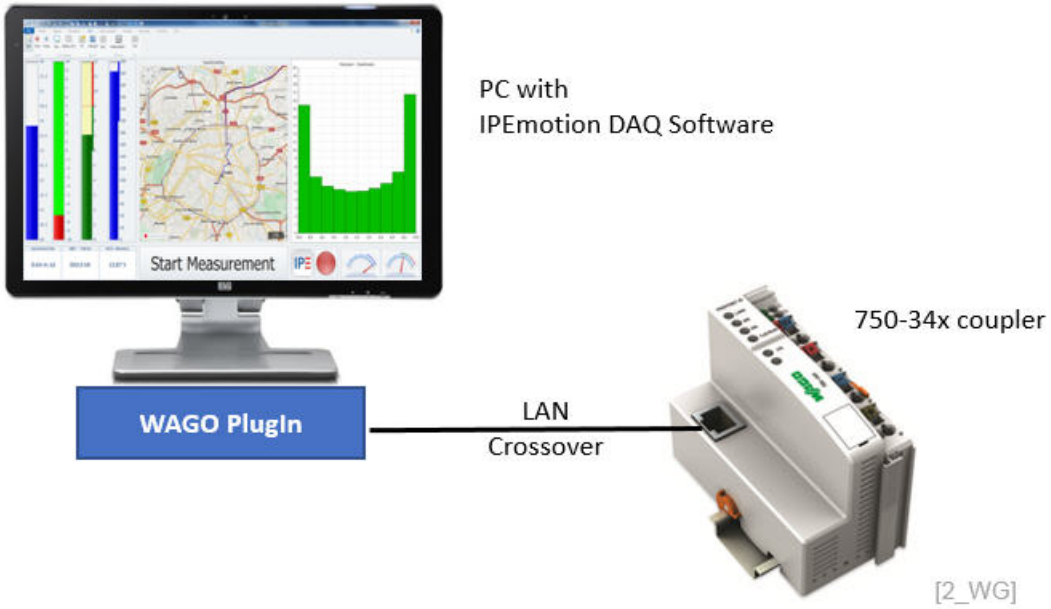
The PlugIn is supporting the following Windows operating systems:

- 32 bit
- 64 bit

3 PlugIn configuration

3.1 Functional architecture

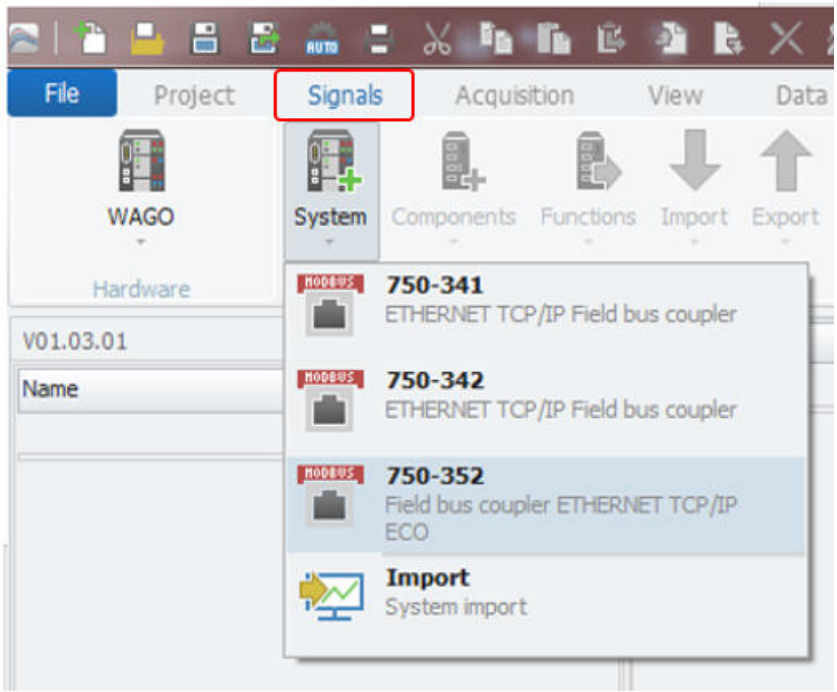
To get started, you need to create and Ethernet connection between the WAGO fieldbus coupler and the PC. The WAGO systems needs to be under power to operate.



[2_WG]

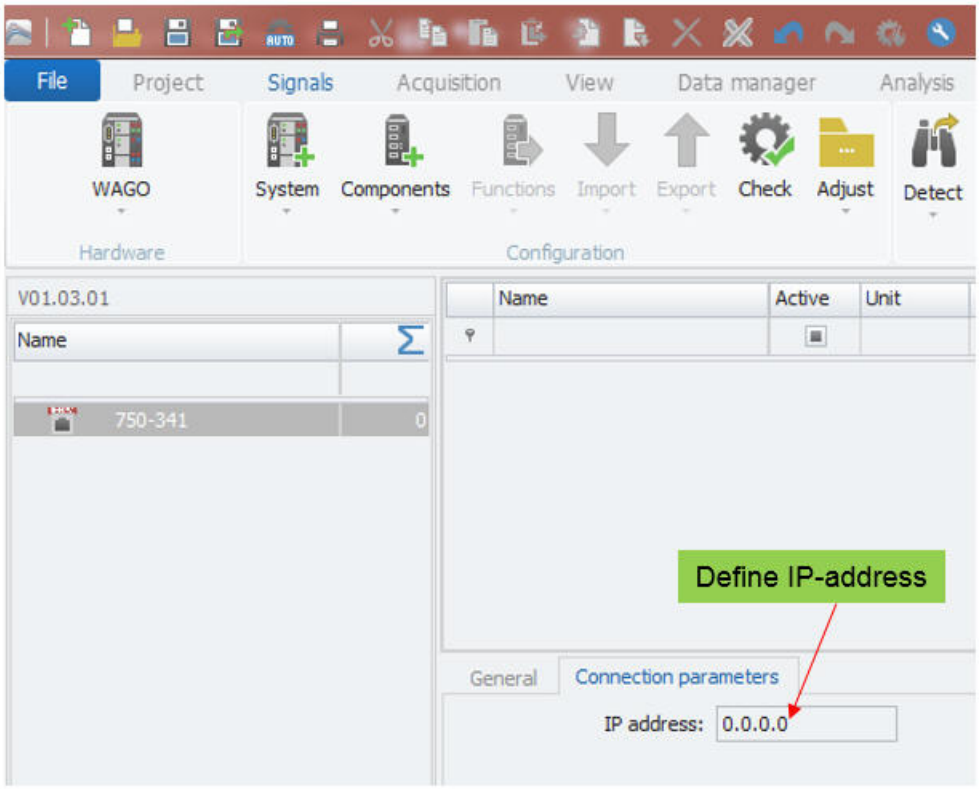
3.2 Creating interface systems

The field bus couplers are based on Modbus TCP protocol. The PlugIn is not supporting an auto detect functions. You need to create the coupler interface manually and define the IP-address of your coupler.



Create coupler interface [3_WG]

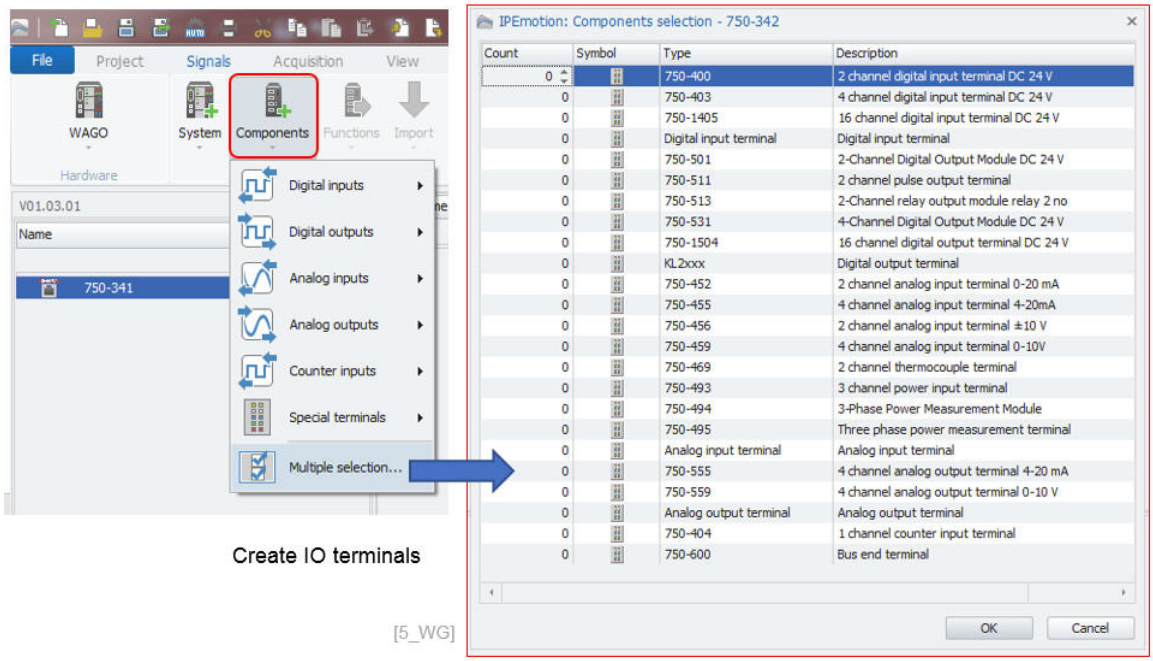
The configuration of the IP-address of the coupler is done through a WAGO specific configuration software. WAGO BootP Server. Refer to the WAGO website for more details: http://www.wago.de/



[4_WG]

3.2.1 Creating IO terminals

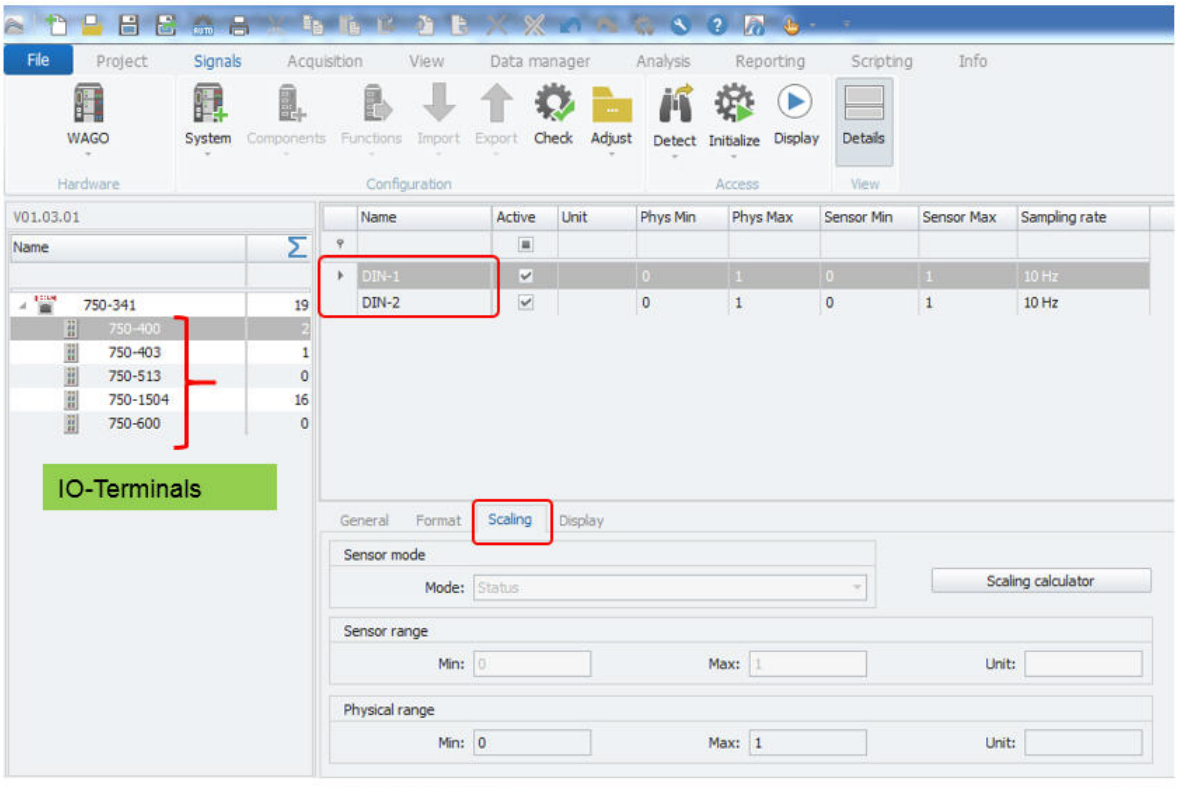
In the next step you create the Io terminals. The order and number of the IO terminals has to match exactly to the physical installation. The order of the IO terminalis defining the Modbus process structure and any difference between the software configuration in the PlugIn and physical hardware setup will lead to wrong measurement values. Even in the software configuration the last terminal has to be the END terminal.



Create IO terminals

[5_WG]

When the IO terminal are created you start with the configuration of channel names, sample rates and sensor scaling.



Channel scaling

[6_WG]

Author: FOT