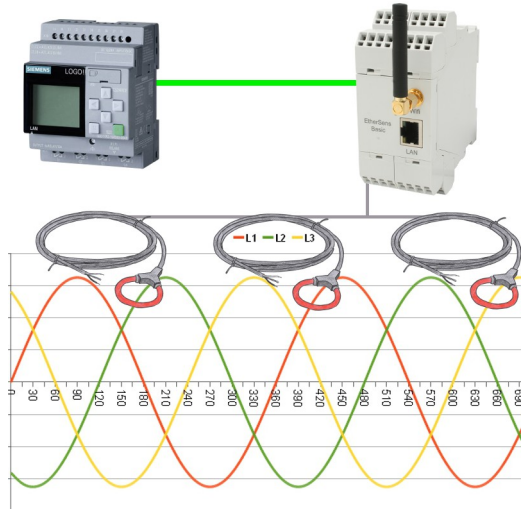
Handling short instructions for

Processing energy data from SPS / LOGO!



Connection of the device

The EtherSens gets directly supplied from the Line L1 with voltage (100-240V AC 50-60 Hz) via the clamping connections. If you also want to do current and power measurements you will also have to connect the Rogowski coils with the device.

Access to the device

The access to device can be done via WLAN (SSID “EtherSens WiFi” - IP address 192.168.1.58) or via LAN (IP address 192.168.1.59).
Please open the web interface of the device and log in on the device via the menu item “log in” (without a password), so you can start the configuration.

Important: Please make sure that before you start with the further configuration the network and WLAN parameters fits to your network and PLC. You can change this parameters on the menu item “system” → “network and WiFi”.

>> Further information about the respective configurations parameters can be found in the manual of the EtherSens within the chapter “Web server”.

Create PLC connection

On the EtherSens you will first have to create the connection to the PLC. Please navigate to the page “process” → “devices” and fill in the last line of the table as follows:

name: *freely selectable*
interface: RFC1006
network interface: interface where the controller is connected to
IP address: *see table*
rack: *default value see table*
slot: *default value see table*

controller type and access type	needed hardware	IP address	rack	slot
S7-200 via PPI	S7-LAN	IP from S7-LAN	0	2
S7-300/400 via MPI/DP	S7-LAN	IP from S7-LAN	0	2
S7-300/400 via Ethernet-CP	-	IP from PLC	0	2
S7-1200/1500 via Ethernet	-	IP from PLC	0	1
LOGO! via Ethernet	-	IP from PLC	0	1
S5 via PG port	S5-LAN++	IP from S5-LAN++	0	2

Next you have to click on the + symbol to add the entry and finally on the “save” button.

Create PLC value

If you now want to transfer a process value from your EtherSens (e. g. a voltage or current value) to you PLC, you will first have to create a new process value. For this please navigate to the page “process” → “process value” and fill in the last line of the table:

sampling rate: 1 second *(higher or lower as needed)*
name: *freely selectable*
chart color: -
change checking: not set
record: not set
view web: not set

Afterwards you have to click on the + symbol to add the entry. Now a dialog should be opened where you can select the previously created PLC connection as a device. As soon as you have confirmed this dialog another dialog with some further parameters will be shown:

register: target value in the PLC *(e. g. DB10.DBD24)*
format: float
type: write
power fail value: not set

Important: The here used format “float” is equivalent to the S7 format REAL. If you want to use the S7 format DINT for integers you will need to select the format “decimal” above.

Finally you have to click on the “Save” button.
If you want to transfer multiple values from your EtherSens to your PLC, you will just need to repeat the steps above as often as needed.

Link PLC value to process value

In the last step you will have to link the newly created PLC value to the process value. For this please swap to the page “process” → “calculations” and search for your created PLC value. In this line you will now have to select “=” as “type 1” and enter the name of the process value within the field “value 1“, which you want to link to, with a preceded @ sign (e. g. “@Voltage L1 (rms)”). Afterwards you will have to confirm your changes by clicking on the button “save”.

Under the web-address https://www.process-informatik.de are product specific documentations or software-driver/-tools available to download.
If you have questions or suggestions about the product, please don't hesitate to contact us.

Process-Informatik Entwicklungsgesellschaft mbH
Im Gewerbegebiet 1
DE-73116 Wäschenbeuren
+49 (0) 7172-92666-0

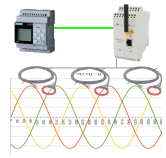
info@process-informatik.de
https://www.process-informatik.de

Copyright by PI 2019 - 2026

Menutree Website:

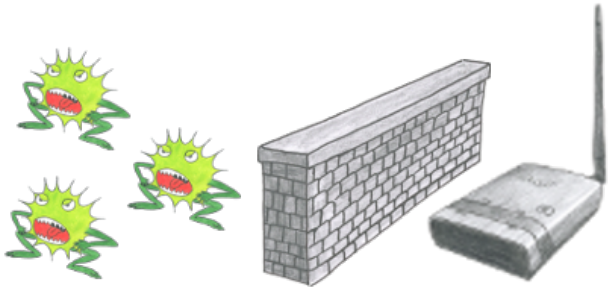
+ Products / docu / downloads
  + Hardware
    + Products for the LOGO! - controls
      + Process energy-data with LOGO!-Control

QR-Code Website:



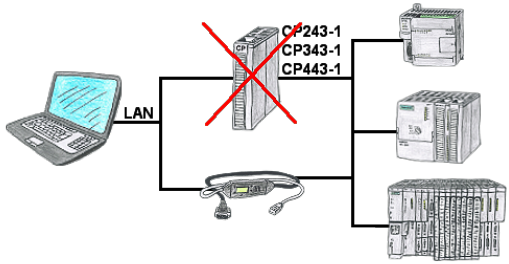
Please make sure to update your drivers before using our products.

Integrated firewall



You use ALF as a WLAN-router to connect your PC with the internet. No Problem, this Sie nutzen ALF als WLAN-Router um Ihren PC ins Internet zu bringen. Kein Problem, ALF masters this task without problems. Its built-in firewall ensures that no hacker from outside changes your configuration or moves in your network.

S7-CP-replacement (without LAN-CP to the PLC-device)



Do you have a S7-PLC-device without CP243-1, CP343-1 or CP443-1 and would like to connect via LAN? Then plug the S7-LAN on the PLC-device and your access via RFC1006 is ready for use.