Handling-Short Instruction for

EtherSens-devices / MONI   V1.0

The EtherSens devices and **MONI** are data loggers according to their specification. Either for digital or analog input- and output-signals, energy data or just as a pure messenger.

Commissioning of the device :
- EtherSens Bridge, EtherSens Control, **MONI**:
> Connect the voltage 24V DC ± 20% to the labeled terminal connectors + 24V and GND

- EtherSens Energy, EtherSens Energy II, **MONI**:
> Connect the voltage 230V AC to the labeled terminal connectors L1 and N.

The device starts up now, you will see the status of the device on the two-color illuminated LED display :

Green:	ON	*device ready*
	OFF	*device executes a restart or is powered off*
Red:	ON	*device is booting*
	flashing at device boot	*device is updating the firmware*
	flashing 0,5 Hz	*device is logging data*
	fast flashing	*output of error codes (see below)*

List of error codes:
- 1x flash: Initialization error of a sensor.
- 2x flashes: Space on the SD card smaller than 1 Kilobyte
                   or SD card removed without logging off.
- 3x flashes: Error at last mail transfer (SMTP).
- 4x flashes: Error at last time adjusting (NTP).
- 5x flashes: No network connection available (only when there isn't a connection to the
                   Access-Point and no LAN link state available).

When you want to reset your device (factory settings) you can press the reset button for 3s to 10s while the device is booting. The button must be pressed with the help of a paperclip and can be found on the bottom / back of the device.

All EtherSens devices have a build in LAN and WLAN interface. The interfaces can be used at the same time.

WLAN-communication

The WLAN interface of the EtherSens devices/**MONI** creates an own network and working as Access Point from factory state. To connect your PC / Laptop to the network, open the network search and look at the network list.

Under the shown networks there should be a WLAN network named "EtherSens WiFi". Now you can connect to it. To access the website of the device you maybe have to change the network settings from your PC. If you have DHCP enabled, EtherSens gives your PC an IP address from the range 192.168.1.100 to 192.168.1.199. Alternatively you can give your PC a manual IP address which comes from the subnet 192.168.1.xxx. The IP address 192.168.1.58 can't be used because it's the default IP address of the WLAN interface of the EtherSens.

On the web server you can change the settings for the WLAN interface. Thus you can connect the EtherSens with another Access-Point in your network. Furthermore it's possible to disable the complete WLAN interface.

The WLAN module supports the channels 1 to 11 and can thus be used in Europe, America and other countries.

Important:
If EtherSens can't connect with your Access-Point please check if your Access-Point opens a network within the channel range named above. If the Access-Point opens a network in channel 12 or 13 please change the channel from your Access-Point.

LAN-communication

Connect the RJ45 plug from your PC with the RJ45 plug from your EtherSens device. Either you choose a patch cable or a cross link cable (with crossed pins). This is possible because the EtherSens device supports the Auto MDIX technology and can detect the transmit and receive direction by itself.

After the physical connection is done the EtherSens device can distribute an IP address to your PC. If you don't want to activate DHCP on your PC, you can give your PC an IP address from the subnet 192.168.1.xxx (range from 192.168.1.1 to 192.168.1.254). Do not give your PC the IP address 192.168.1.59, because this IP address is used by the LAN interface of the EtherSens.

Opening the device web-page

To open the web-server of the device you have to open your browser and tip in the IP address of the LAN or WLAN interface.

for WLAN: 192.168.1.58
for LAN: 192.168.1.59

Now the web-server of the EtherSens-device/**MONI** should show up with the following start-screen:

The view of the start page can vary by different device types or versions.
The picture above shows the start page of a EtherSens Energy device.

More about the EtherSens-devices/**MONI** as well as the current device manual or the current firmware file can be found under
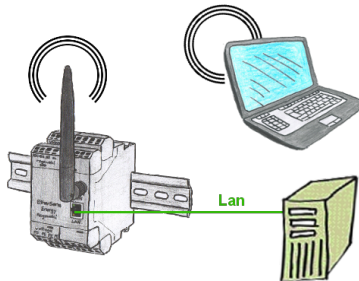
Menutree Website:

+ Products / docu / downloads
  + EtherSens Energy-II

QR-Code Website:

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

Parallel access LAN/WiFi

Access parallel via LAN and Wifi to the EtherSens-device. Therefor create via the web-server for each way an ip-address, regardless whether its the same subnet or not.

View information from the connected bus-system in plain text without using the Simatic-Manager or TIA-Portal. With the connection-menu you get the list of reachable nodes, marked in color whether it is an "active bus-participant", is a "candidate for inclusion in the bus" or a "passive bus-participant".

You can also see whether cyclic bus-parameter-protocols have been received, you are "in the bus" yourself, the bus-address of the participant recognized as a "direct participant" (on which the S7-LAN is located) and whether the contained modules such as "variable control", "gateway-coupling",... actively communicate.

Communication with Win98 – XP/Vista/7/8/10/11 via network to S5-PLC
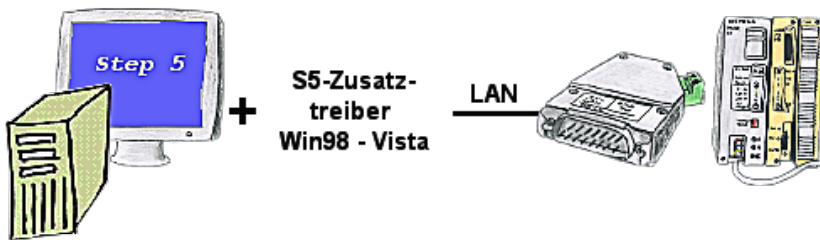
You still have a PC with Win98 and a MS-DOS-based Step5-package and would like to go Online on your S5-PLC via LAN? No problem, the provided virtual Com-Port PLCVCom emulates a COM-port on your PC with which you go Online. Even your MS-DOS-based Step5-software on this WIN98-PC can use this virtual Com-Port. With a patchtool for the Siemens Step5-software, which is provided as well, nothing else stands in your way to communicate via LAN.