

# 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  $\pm$  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:

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

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).

If you want to reset your device, you must press and hold the reset-button FS when starting the device until the LED lights up green. On some devices, the button is operated using a paper-clip and is located 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.

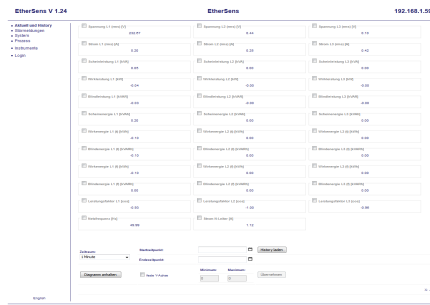
After the physical connection is done the EtherSens device can distribute an IP address to your PC. If you don’t want to activate DHCP on your PC, you can give your PC an IP address from the subnet 192.168.1.xxx (range from 192.168.1.1 to 192.168.1.254). Do not give your PC the IP address 192.168.1.59, 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:**

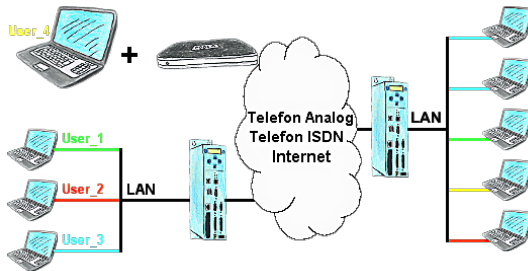
- + Products / docu / downloads
- + Hardware
  - + Analysis technic
  - + EtherSens
  - + EtherSens Basic

**QR-Code Website:**



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

User dependant network access



You have PLC/LAN-participants different supplier in your network and everybody should have access to this network? No problem, you give every supplier a VPN-username and password, define in the destination device a user-dependent network-access and after positiv login he only can communicate to the released ip-addresses.

## Remote-maintenance Siemens-S7-PLC with MPI/Profibus over VPN-server



Remote-maintenance of a Siemens-S7-controller with S7-LAN on MPI/Profibus over separate VPN-server

## Remote-maintenance Siemens-S7-PLC with PN-Port with firewall



Remote-maintenance of a Siemens-controller with network-connection via secure VPN-tunnel and scalable firewall