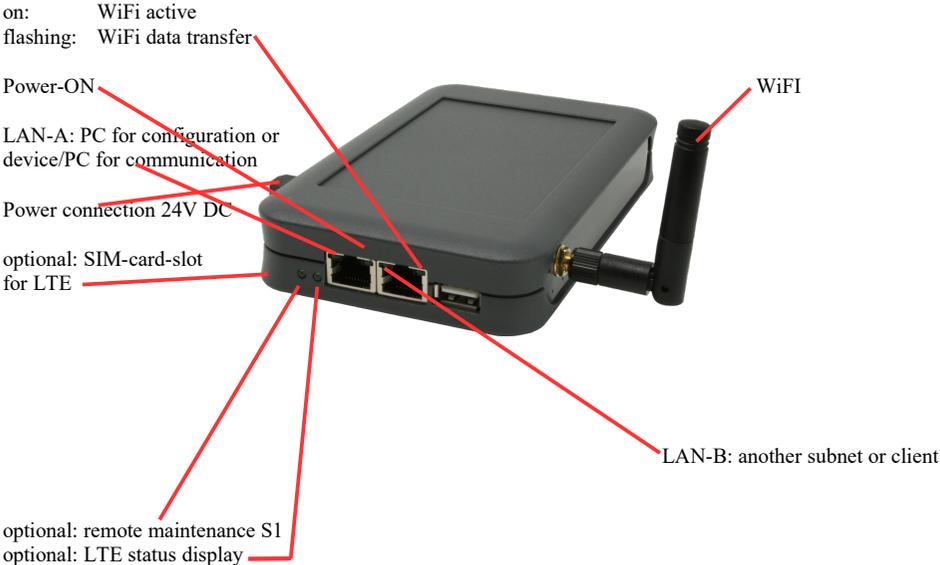


Handling-Shortinstruction V1.0 for CONNECT-HS-Router + CONNECT-Router industrial WiFi-router

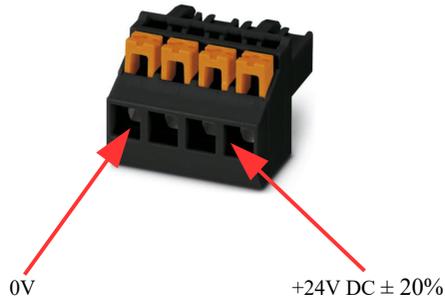
Connectors:



Power connection :

Voltage: 24 V DC \pm 20%
power consumption : 1,2W

Assignment of voltage plug :



Initial start-up:

- CONNECT-Router creates a WLAN network with an SSID „CONNECT WiFi“ with active DHCP master (laptop is automatically assigned an IP address)
- Connect laptop to this WiFi network and open with browser webserver with IP: <http://192.168.2.1>

or

- Connect the PC to the LAN port using a LAN cable
- PC must be in the 192.168.2.xxx subnet

Starting page:

commissioning

Before you can start to use the device you will have to set up some basic settings. Afterwards your device will be immediately ready for the communication.
On the page "configuration" you can change these as well as some further settings at any time.

basic configuration

In the first step you have to specify how you want to use your device.
Specifying the name is optional.

device name:

operation mode: Bridge
 Router

Basic configuration:

Assign a name to the device for identification

2 operating modes are possible with the CONNECT-Router :

- Bridge Multiple interfaces connected to a common network
- Router Separation between LAN and WAN (Internet) network

For operation mode Bridge:

LAN configuration

In the last step you have to configure how your device should be connected with the local network.

interfaces: LAN-A
 LAN-B
 WLAN

IP settings

IP configuration: DHCP
 manually

DHCP server: enable

IP address:

subnet mask:

WLAN settings

search:

mode: ▾

SSID:

security type: ▾

channel: ▾

LAN configuration:

Determine the interfaces that should be bridged

IP settings:

- IP configuration: DHCP (parameters come from a DHCP master on the network)
Manual (IP address + subnet mask fields must contain valid values)
- DHCP server: Device is a DHCP server on the selected interfaces
- IP address: IP address of the device
- subnet mask: Subnet mask of the device

WLAN settings:

- Search: Searches for accessible WiFi networks and lists them. By clicking on an entry, the selected WiFi network is used for connection
- Modus: Access-Point (AP) [the CONNECT-Router opens its own WiFi]
Client [the CONNECT-Router connects to an existing WiFi network]
- SSID: Name of the connected or created network
- Sicherheitsstufe: Open (no encryption)
WEP (either 5 or 13 ASCII/10 or 26 hexadecimal characters)
WPA (8-64 ASCII characters)
WPA2 (8-64 ASCII characters)
WPA/WPA2 8-64 ASCII characters (Independent automatic selection whether WPA or WPA2)
- Kanal: Selection of the connection channel

for operation mode Router:

WAN configuration

Next you have to configure how your device should be connected with the internet / WAN.

WAN interface:

IP settings

IP configuration: DHCP
 manually

IP address:

subnet mask:

gateway address:

back

next

WAN interface:

IP settings:

- IP configuration:

- IP address:

- subnet mask:

- gateway address:

Set the WAN interface from LAN-A, LAN-B oder WLAN

DHCP (Parameters come from a DHCP master on the network)

Manuell (fields IP Address + Subnet Mask + Gateway Address must contain valid values)

IP address of the device

Subnet mask of the device

Gateway address of the device

LAN configuration:

Determine the interfaces that should be connected to the local network

LAN configuration

In the last step you have to configure how your device should be connected with the local network.

interfaces: LAN-B
 WLAN

IP settings

IP configuration: DHCP
 manually

DHCP server: enable

IP address:

subnet mask:

WLAN settings

search:

mode:

SSID:

security type:

channel:

back

save

IP settings:

- IP configuration: DHCP (Parameters come from a DHCP master on the network)
Manuell (fields IP address + subnet mask must contain valid values)
- DHCP-Server: Device is a DHCP server on the selected interfaces
- IP address: IP address of the device
- subnet mask: Subnet mask of the device

WLAN settings:

- Search: Searches for accessible WiFi networks and lists them; by clicking on an entry, the selected WiFi network is used for connection
- Modus: Access-Point (AP) [the CONNECT-Router opens its own WiFi]
Client [the CONNECT-Router connects to an existing WiFi network]
- SSID: Name of the connected or created network
- Sicherheitsstufe: Open (no encryption)
WEP (either 5 or 13 ASCII/10 or 26 hexadecimal characters)
WPA (8-64 ASCII characters)
WPA2 (8-64 ASCII characters)
WPA/WPA2 8-64 ASCII characters (Independent automatic selection whether WPA or WPA2)
- Kanal: Selection of the connection channel

By “Save” the selected configuration is adopted. The device is ready for use in the specified operating mode after a short waiting period (maximum 10s).

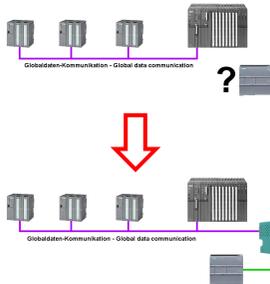
You need the following operating modes for the following situations :

Situation	Operating mode	WLAN mode	Particularities
With a laptop around the S5/7 PLC + CONNECT-Router	Bridge	Access-Point	PLC via S5/7 LAN on LAN-A port, additional LAN participants on LAN-B port
Bring S5/7-PLC or LAN-participants into the existing WiFi network	Bridge	Client	PLC via S5/7-LAN / LAN-participant on LAN-A port, additional LAN-participant on LAN-B port
Create a separate subnet for connected devices	Router	Access-Point	LAN-A port to the company network, LAN-B port + WLAN to the machine network (Don't forget routes in the company network)
Extend LAN route Attention: 2 devices are required	Bridge	1. device Access-Point 2. device Client	One device as AP and the second as client

After selecting the configuration, save it in the device and after a short initialization time (max. 10s) the devices are ready for operation.

You can find out more about the operating modes in the device manual on the CONNECT-Router product page.

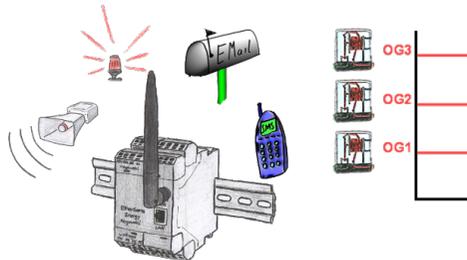
Global data communication (MPI) also with network-PLC



Running global-data-communication between MPI-PLCs (S7-300/400), is one of these PLCs replaced with a newer PLC with network-interface (S7-1200/1500), this PLC was not able to access this data.

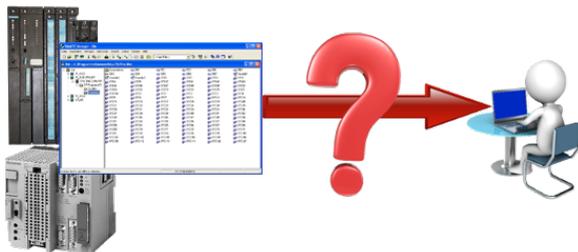
Simply configure the global-data of the “old” PLC via the web-server in the S7-LAN-module. Enter the new PLC as a TCP/IP-connection-partner and the module writes/reads the data via PUT/GET from this network-PLC and passes it on as before.

Alarming



Don't log with EtherSens-device only the process-values, also monitor them simultaneously. Once a predetermined threshold is exceeded/not reached, the EtherSens-device indicates this.

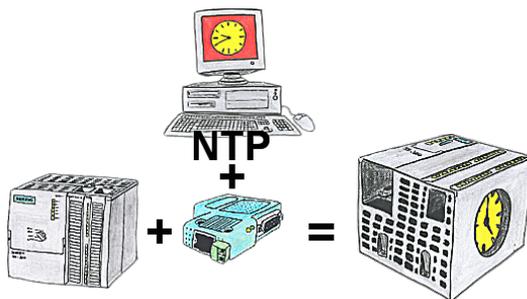
Automatical backup of your PLC



Guaranteeing security against production-downtimes through regular backups of S5- or S7-PLCs on your PC. S5/S7/H1-backup/restore-software saves all projected controls at a predetermined time. Whether every minute, hourly, daily, weekly or once a month, the PLC is completely read out and saved on the hard-disk/network-drive of the computer.

If the backup-battery fails or the PLC is damaged, you can use this backup-file to restore the PLC.

Actual time for the PLC?



You need in your PLC a actual time? No problem, with the NTP-function the S7-LAN-module get from a NTP-(Time-)Server the actual time and transfers it direct into the configured PLC or for processing in a DB.