Handling-Shortinstruction V1.0 for

CONNECT-HS-Router + CONNECT-Router
industrial WiFi-router

Connectors:

WiFi

Power connection 24V DC

optional: SIM-card-slot for LTE

LAN-A: PC for configuration or device/PC for communication

optional: remote-maintenance S1
optional: LTE status display

Power-ON

LAN-B: another subnet or client

on: WiFi active
flashing: WiFi-data transfer

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Power-ON

LAN-A: PC for configuration or device/PC for communication

Power connection 24V DC

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WiFI

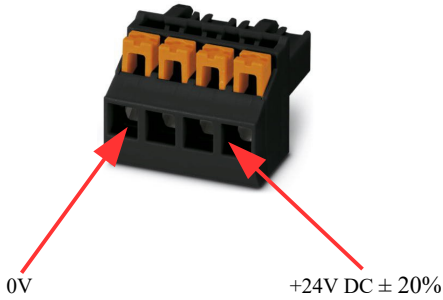
LAN-B: another subnet or client

optional: remote maintenance S1
optional: LTE status display

Power connection :

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

Assignment of voltage plug :



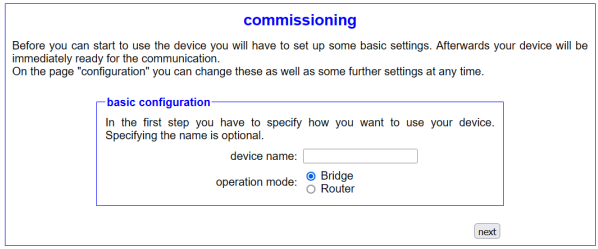
Initial start-up:

- 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:



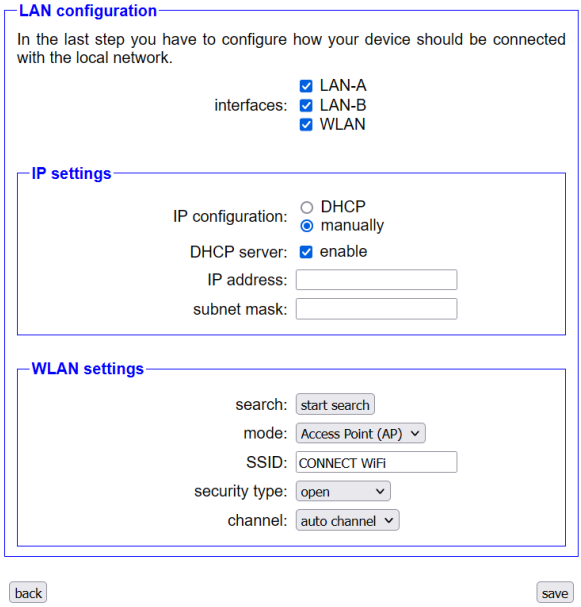
Basic configuration:

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:
Determine the interfaces that should be bridged

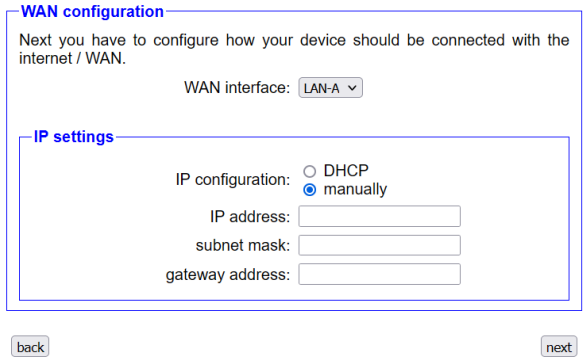
IP settings:

- 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 hexidecimal 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:



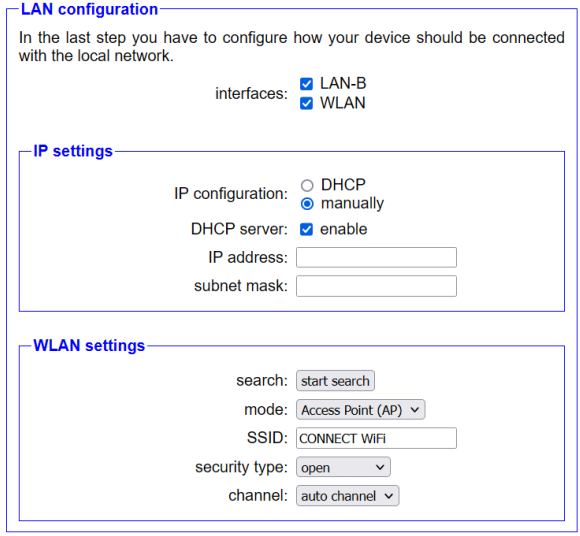
WAN interface: Set the WAN interface from LAN-A, LAN-B oder WLAN

IP settings:

- IP configuration: DHCP (Parameters come from a DHCP master on the network)
  Manuell (fields IP Address + Subnet Mask + Gateway Address must contain valid values)
- IP address: IP address of the device
- subnet mask: Subnet mask of the device
- gateway address: Gateway address of the device

LAN configuration:

Determine the interfaces that should be connected to the local network



IP settings:

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  - WEP (either 5 or 13 ASCII/10 or 26 hexidecimal characters)
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  - WPA/WPA2 8-64 ASCII characters (Independent automatic selection whether WPA or WPA2)
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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.

https://www.tpa-partner.de

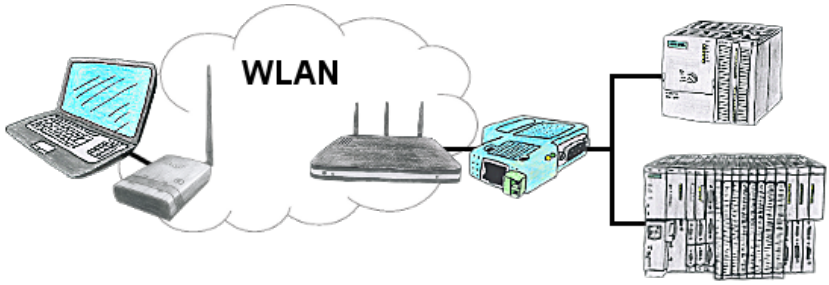
Menutree Website:

+ Products / docu / downloads
  + Hardware
    + Router 3G / WLAN/WIFI
      + CONNECT-Router-devices
        + CONNECT-Router

QR-Code Website:

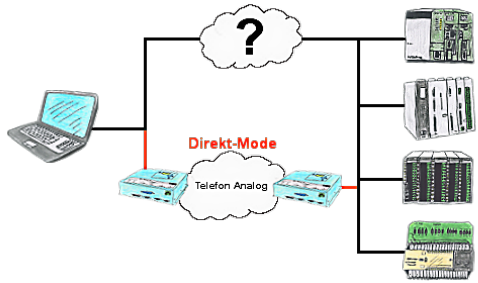
Please make sure to update your drivers before using our products.

Operation as a WLAN-client



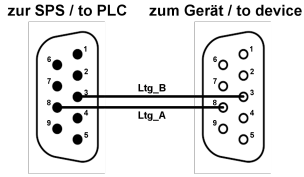
You are on site your plant and should move round the machine and simultaneously control or monitor. WLAN is reachable, but your PC is not able to provide WLAN. No problem, you parametrize ALF as a client and connect him to the PC and join the reachable WLAN and you are online on the PLC.

Direct-mode „extended serial interface“



There is an unsupported control or data logger or converter integrated in your installation which protocol is not supported? No problem, the signs that the PC in the office sends will be transferred via telephone line by the Direct-mode , and on-site reproduced by the TP/TB. The way back is identical. So in that case there's also a communication to the electronic devices available.

Protection of the bus interface



Participants on "unknown" bus-connection, threatening danger of damage

Programming-adapters or other bus participants to attach a 9-pin bus-connection, who has not a queasy feeling that damages can arise.

Who owns the assemblies "VIPA 21x-2bm0x and 208-1dp0x" from VIPA knows the problem. Quickly, a voltage-conducting pin is pulled against GND => The short circuit is existing.

Simply save only the plug-contacts of the bus-connection from wear due to permanent plugging and removal of participants. For this purpose, the bus-coupler plug can be used.

A small component with great effect.

Easiest configuration by included webserver

To configure ALF you dont need additional driver or special cables, you connect your PC via LAN or WLAN with ALF and over the integrated webserver you can configure the needed function.

Remote maintenance with TS-software without original TS-adaptor

You have to reach urgend your PLC via remote maintenance and have no TS-adaptor in your company? No problem, configure with the MPI-Kabelmanager your S7-interface-cable MPI/PPI-Kabel the mode "TS" for "remote maintenance", connect this cable with the TS-Adapter (article number 9350-TS) with a standard modem and send it all to your client. Now you will be able to start the connection with your TS-sofware and solve the problem. And this all without buying a original TS-adapter.