

Handling-Shortinstruction for CLxxx-S7-TCP V1.0



Hardware

The CLxxx-S7-TCP-module will be plugged direct on the PG-port of the CL200 – CL400 BOSCH-PLC. It will be powered by external 24V $\pm 20\%$ with the green connector. The pinning of the 24V DC is written direct in front of the plug.

The both square LED's in the Ethernet-Connector shows the user the link-state of the network.

Green LED: 100 Mbit/s

Amber-coloured LED: 10 Mbit/s

LED off: no network connected.

LED on: network connected.

LED flashing: communication above the network

The round green LED shows the state of the S5-communication.

LED off: Device is off or booting.

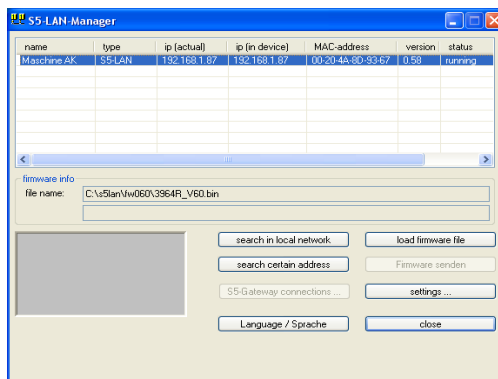
LED on: PLC is ONLINE

LED is flashing slowly and no network is connected → PLC will be searched.

LED and network LED are flashing → there is a communication to the PLC.

S5-LAN-Manager

After pressing the button „search in local network“ the user can see in the table all found S5-LAN-modules:



Hint:

When there is no module found, please deactivate the „windows firewall“ on your PC and repeat the search. The modules have by factory-setting DHCP and when there is no DHCP-server in the network, the modules gives them itself an ip-address from the 169.xxx.xxx.xxx-range. These ip-address-range is often blocked by the „windows firewall“.

Configuration of the device

Select an entry of the table and press the button „settings“. Then you got following dialog:

The screenshot shows a configuration dialog box titled "CLxxx-LAN". It has a blue title bar with a close button in the top right corner. The dialog contains the following fields and options:

- Device:** An empty text input field.
- S7/S5-Server-Port (for s7: 102):** A text input field containing the value "102".
- IP-Address section:** A group box containing:
 - Two checkboxes: DHCP /AutoIP and auto Subnet.
 - IP-Address:** A text input field with the value "192 . 168 . 1 . 64".
 - Subnet Mask:** A text input field with the value "0 . 0 . 0 . 0".
 - default gateway:** A text input field with the value "0 . 0 . 0 . 0".
- Buttons:** "OK" and "Cancel" buttons are located on the right side of the dialog.

Configure the necessary data:

device name

The device name is an arbitrary name, so you can identify the module correct.

S7/S5 server port

TCP/IP-port where the S7-TCPIP-protocol (RCC1006) will be handled.

DHCP/auto ip

If this item is selected, the device is looking while booting for a DHCP-server. If there is no response within 3 times of searching this server (is taking some seconds) so the module uses an ip-address from the "auto-ip-address-range".

auto subnet

If this item is selected, the device compute the subnet mask automatically. For example for an ip-address of 192.168.0.80 the subnet will be used like 255.255.255.0. In the configuration field subnet mask there is no entry necessary.

ip address

If "DHCP/auto ip" is switched off, the ip-address of the device can be configured here.

Subnet mask

Here is defined the subnet mask of this device. When you configure the mask like 0.0.0.0 so the device will use an auto-subnet mask.

standard gateway

If the device has to use a router, so the ip address of this router has be configured here.

After pressing the "OK"-button, the data will be stored in the CLxxx-S7-TCP-module and the module is restarting up.

Reset

If the user has configured a wrong ip address and is not able to reconfig the module with the S5-LAN-manager, so the module can be set to the factory default. For this, you have to press with a straighten paper clip through the whole on the switch for 2 seconds. After this 2 seconds the LED begins for a fast flashing. Now you can brake pressing the switch. The module makes an restart and will start up with the configuration “DHCP/auto id” and “auto subnet”. After lighting of the round green LED the modul is ready for working.

technical data:

dimension: 56 x 61 x 20 mm
ext. Power supply: 24V DC, 80mA max.
connector: 10/100 MBit (autosensing)
scope of delivery: CLxxx-S7-TCP-module
Small 2-pin power-plug

Further interface-cable for S5

PG-UNI-Kabel

- Couples the PC (9pol. COM-interface) with the 15 pole X4/X5 interface port of the plc
- Galvanically separably to 1kV with PG ISO adapter
- Prolongable up to 300 meters
- Complete electronics in the plug housing
- Supply from the PLC over the current sources of the PG-port
- Functioned also at some CP's, IP's and Sinumerik controls



PG-UNI-II Kabel

- ESD firm transducer component up to 15kV
- 9pin and 15pin plug housings are made of solid metal
- For controll of data transmission, there are two LED's integrated (RxD and TxD).
- Couples the PC (9pol. COM-interface) with the 15 pole X4/X5 interface port of the plc
- Galvanically separably to 1kV with PG ISO adapter
- Prolongable up to 300 meters
- Complete electronics in the plug housing
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PG-USB-Kabel

- Couples the PC (9pol. COM-interface) with the 15 pole X4/X5 interface port of the plc
- 15pin plug housings are made of solid metal
- Complete electronics in the plug housing
- Supply of the cable complete from the PC
- Prolongable up to 100 meters
- Is „active“ in relation of the plc
- Is working with standard S5-Software (Drivers for Win2000 and XP will be delivered with this cable)



Attention: The delivered driver for Windows 2000 and XP installs the PG-USB-Kabel as a virtual COM-Port. For use with the original Siemens Step5 software you have to install the also delivered driver “PG-USB-Kabel an S5” and then you can use it.

PG-COM-Kabel

- Couples the PC (9pol. COM-interface) with the 15 pole X4/X5 interface port of the plc
- Complete electronics in the plug housing
- *Supply from the PLC over the 5V of the PG-port*



PG-ISO-SET

- Galvanically separable from pc to the plc up to 1kV
- contact-protected housing, it is plastic housing
- The set contains PG-UNI-Kabel (3m) Art.Nr.9359-3 and the PG-ISO-Adapter Art.Nr.9359-8
- Supply of the module from the plc Voltage 5V and/or 24V

SC-09-Kabel

- Couples the PC (9pol. COM-interface) with the RS485 interface port of the plc
- PLC coupling with 25pin D-Sub or with Mini-Din-plug (special adapter)
- Supply from the PLC over the 5V of the PG-port
- Complete electronics in the plug housing



PG-ISO-Adapter for PG-UNI/PG-UNI-II

- Galvanically separable from pc above the PG-UNI-Kabel to the plc up to 1kV
- contact-protected housing, it is plastic housing
- Generates a new Ground and new Current Sources for the communication
- Supply of the module from the plc Voltage 5V and/or 24V



S5-LAN+-Modul

- 3 minutes and PG interface of the S5-PLC-control is network-compatible
- AS511 via virtual COM port
- S7-TCPIP RFC1006 compatible (S7 panel to S5 PLC)
- Supply of the module from the PLC voltage 24V
- Active module, integrated power sources for TTY communication



S5-BRIDGE (LAN and WIFI communication parallel)

- 10 minutes and PG interface of the S5 PLC control is network-compatible (cable and/or WIFI)
- AS511 via virtual COM port (cable and/or WIFI)
- S7-TCPIP RFC1006 compatible (S7 panel on S5 PLC, cable and/or WIFI)
- Supply of the module from the PLC voltage 24V
- Active module, integrated power sources for TTY communication



Netz-Adapter for PG-UNI/PG-UNI-II

- Generates new Current Sources for the communication
- Operation area: damaged Current Sources, not existing Current Sources, sanded Current Sources, passive Current Sources
- *Supply of the module with 24V external*



Additional adapters for PG-UNI/PG-UNI-II

general : Small Adapter, only 10cm long
 Plug mechanics fitting to the plc

CP525-Adapter

- Connection to the **programming port** of the CP525



CP525-K-Adapter

- Connection to the **communication port** of the CP525
- This adapter can be used for following devices, too: CP524 and SAS523/525

AG150-Adapter

- **Only** use with the Netzadapter, because plc AG150 has an passive interface port!

WF470-Adapter

- **Only** used with the Netzadapter, because WF470 has an passive interface port!

SINUM-Adapter

- This adapter can be used for following plc-type: 805, 810, 820, 840, 850, 880

Additional adapters for PG-USB

general : Small Adapter, only 10cm long
 Plug mechanics fitting to the plc

CP525-Adapter

- Connection to the **programming port** of the CP525



CP525-K-Adapter

- Connection to the **communication port** of the CP525
- This adapter can be used for following devices, too: CP524 and SAS523/525

AG150-Adapter

WF470-Adapter

SINUM-Adapter

- *This adapter can be used for following plc-type: 805, 810, 820, 840, 850, 880*

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.

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+ CLxxx-S7-TCPIP

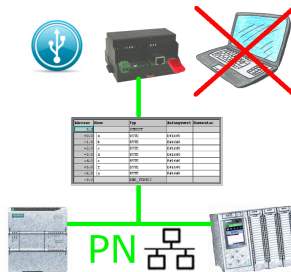


QR-Code Website:



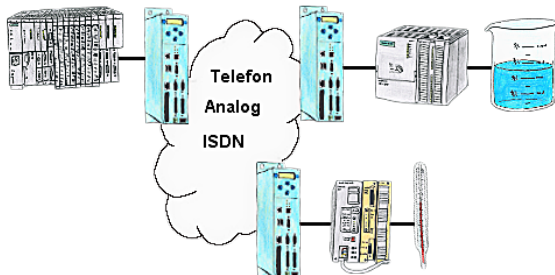
Please make sure to update your drivers before using our products.

DB-Backup/Restore S7-PLC PN-port on USB-stick via dig. IO



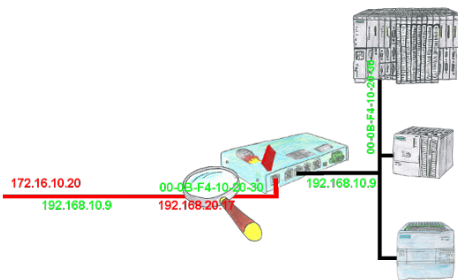
Via digital input triggered DB-backup/-restore without additional PC via PN-port to USB-stick

PLC coupling (data exchange between PLCs)



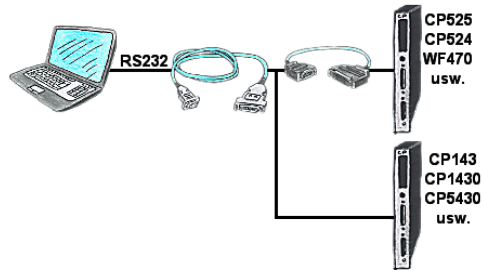
Your pumping stations report the water levels of the central control via telephone network. The central office itself can of course transmit commands/messages to the substations as well. Thereto no dedicated line is required, a "normal" telephone connection is sufficient because the devices cut the line after occurred message.

Permit requests depending on the ip- and mac-address



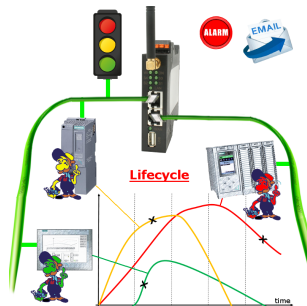
You have in your facility machines from different manufacturers and no one does get access to the controls of the other? No problem, with the S7-firewall you can filter who can ever communicate with the control network and which user with which end users. This is done through the IP address and MAC address.

Serial communication with CP and more S5-assemblies



You have a PC with programming software and a 9pin COM-port as interface? No problem, for this purpose the PG-UNI-II-cable is exactly the right product. Connect it to a Siemens assembly such as H1-CP (CP1430), WF470 and PC or CP-525 with the CP525-adapter and PC and you're Online.

Profinet life cycle monitoring



Identify impending failures in your Profinet.
Creeping aging will be displayed to you very detailed.
The Profinet-Watchdog give you the change to react before something happens.