

Handling-Shortinstruction for S5-LAN++ V1.4



Hardware

The S5-LAN++-module will be plugged direct on the S5-PG-port and will use the +24V of the PLC. If the PLC don't have +24V (for e.g. S5-90/95/100U) the device will be usable with external +24V with the green connector.

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.

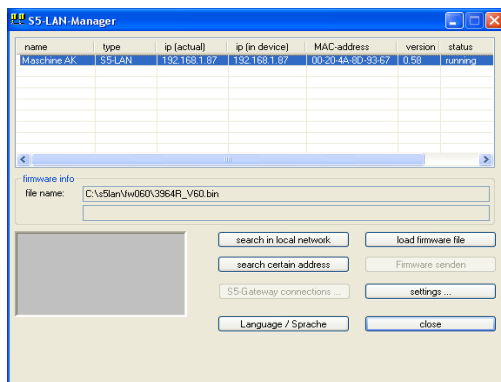
LED on: PLC is ONLINE

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:

S5-LAN

device name: Maschine AK

S5 PG port: 10010

S5 server port: 2002

ip address

☒ DHCP/auto ip ☐ auto subnet

ip address: 192 . 168 . 1 . 87

subnet mask: 255 . 255 . 255 . 0

standard gateway: 0 . 0 . 0 . 0

OK

Cancel

Configure the necessary data:

device name

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

S5 PG port

TCP/IP-port where the programming communication will be handled. In the normal case, you don't have to change them.

S5 server port

TCP/IP-port where the S5-LAN-LINK-protocol resp. the VIPA-protocol 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 S5-LAN++-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.

Driver PLC-VCom

For the communication with a Step5-programming software a virtual com-port is needed. This com-port is called PLCVCom. You have to install it on your PC. When you communicate with this virtual com-port, the selected product will be driven.

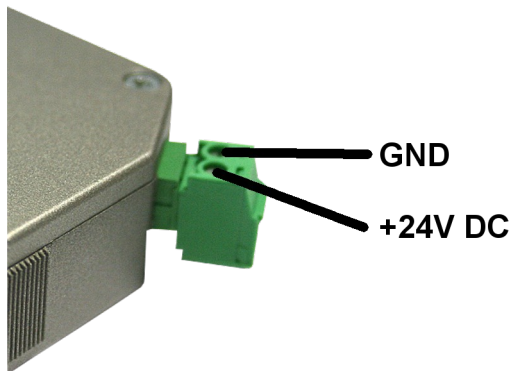
The virtual com-port is only then visible, configurable and usable, when the state of the PLCVCom is “connected”. This means, a usable product is responsive.

technical data:

dimension: 42 x 15 x 65 mm
ext. Power supply: 24V DC, 80mA max.
connector: 10/100 MBit (autosensing)
scope of delivery: S5-LAN++-module
virtual com-port for windows

Attention: For the S5-plc 6ES5102-8MA02 version 3 will be the PG-ISO- or Netz-Adapter required.

Power connection:



Alternative S5 interface product with WIFI

S5-BRIDGE (Art.nr: 9359-S5-WIFI)

Access to SIMATIC S5-90 ... S5-155,
SINUMERIK over WIFI & Ethernet

- in 10 seconds ONLINE
- with all S5 [90-155 & CPs & IPs]
- WITHOUT cable, NO WIFI-Infrastructure necessary, integrated Access-Point

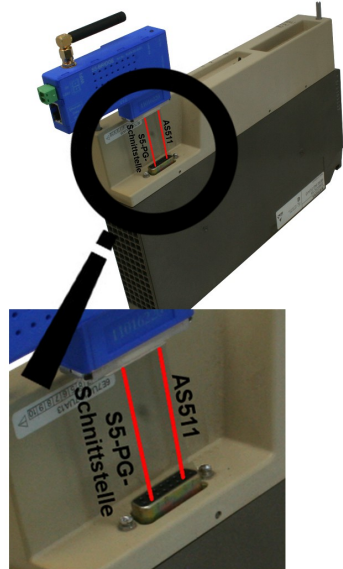
Your advantage

- S5-BRIDGE is worldwide the smallest WIFI Gateway to all your S5_PLC
- integrated WIFI and Ethernet interface, in one housing, mobile access to all PLC systems is no problem
- wireless access to the AS511, S1, S2 interface on all S5 controls, is no longer an obstacle, as is access to all other network components
- the system also acts as an S5 network adapter for programming, Remote maintenance and for coupling the different PLC controls

Thanks to the integrated S7 protocol, both HMI devices, e.g. current panel series, as well as any other S7-Ethernet device, directly via S7-TCP-IP can be connected via LAN & WIFI.

Parallel access via LAN / WIFI thanks to the included multiplexer

Quite simply directly from Siemens Step5, PG-2000, any other S5 package and WinCC projects



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
- Supply from the PLC over the current sources
- Functioned also at some CP's, IP's and Sinumerik controls



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



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

More to the interface-cable as well as the current manual you can download under

<https://www.tpa-partner.de>

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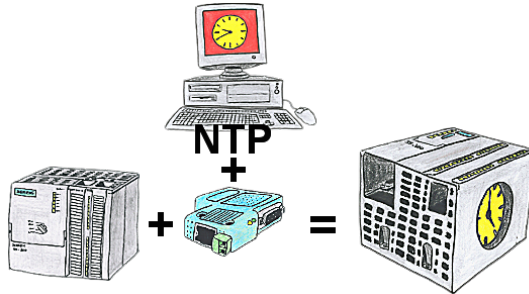
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+ Products / docu / downloads
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+ Programming devices
+ S5
+ S5 over LAN
+ S5-LAN++

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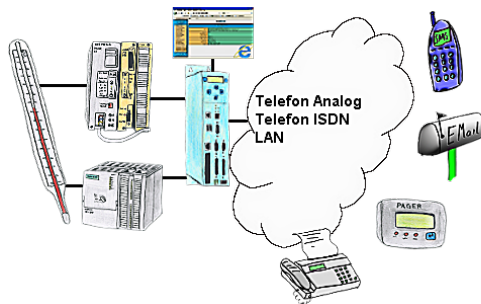
Please make sure to update your drivers before using our products.

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.

Failure report transmission without any change in the PLC programm



Your outstation reports the current value cyclically, or in case of malfunction the status via FAX, as SMS to your mobile phone, to your pager or also via e-mail. And this without an intervention of the PLC-program. Here the variables and actions are stored and processed in the TP-II.