

Handling short instructions for

Panel connection to S5/S7-PLC via LAN / WiFi



Prepare controller

If you want to access a S7-200 via PPI or S7-300/400 via MPI/DP from your panel you will first have to connect the S7-LAN to the PPI/MPI/DP interface of your controller. The module normally will get the power supply directly from the controller and detects the bus parameters completely automatically. This means no manual configuration within the module is necessary. By default the S7-LAN has the IP address 192.168.1.56. This IP and further settings can be changed via the TIC or the web interface of the module if desired. For further information please read the short instructions and the manual from the S7-LAN module.

For the access to a S7-1200/1500 or LOGO! no S7-LAN is needed, because the panel can be directly connected through a Ethernet cable or via WiFi with two ALF-UA devices.

If you instead want to access a S5 controller from your panel you will first have to connect the S5-LAN++ to the PG interface of your controller. The module normally will get the power supply directly from the controller. For controllers (e. g. AG90/95/100U) which do not offer a power supply on the PG interface the module have to be powered externally via 24V DC. By default the S5-LAN++ does not have a IP address. To change this you will need to connect the S5-LAN++ to your PC and assign an address to the module (e. g. 192.168.1.56) with the help of the tool S5-LAN-Manager. For further information please read the short instructions and the manual from the S5-LAN++ module.

Important: Your controller with Ethernet interface or S5-LAN++ or S7-LAN as well as the panel and if applicable the two ALF-UA devices have to be all in the same subnet. In this instructions the subnet 192.168.1.xxx is used, but you choose another subnet if you want.

Configure connection via WiFi

If you want to connect your controller and panel wireless via WiFi you will now have to configure the both ALF-UA devices.

First you should only connect the first device, which you later want to connect with the controller, and establish a connection to the WiFi network with the SSID “ALF-UA”. Your PC will automatically gets a IP address from the device. Now open the web interface of the device via the IP address 192.168.2.1 and log in with the user name “admin” and password “admin”.

Next change the operation mode of this device to “AP Bridge” and give the device a unique IP address from your subnet (e. g. 192.168.1.1) and enter a SSID (name of the network). For safety reasons you should choose “WPA2 PSK” as encryption and protect the network with a password.

In the next step you will have to connect to the second device, which you later want to connect with the panel. The first steps are the same as for the first device. For the operation mode you now select “Client Bridge” and give the device another IP address from the subnet (e. g. 192.168.1.2). For the WLAN parameters (SSID, encryption and password) you will have to enter the same values as for the first device.

>> Further information about the commissioning and the further configuration parameters can be found in the short instructions and the manual of the ALF-UA.

Configure connection in WinCC

In the last step you will have configure the connection to your controller within your panel. Therefore you have to open your WinCC or TIA project and navigate to the connections of the panel. Here you will need to add a new entry. For the interface of the control panel you will have to select “ETHERNET”. The remaining parameters can be taken from the following table.

controller type and access type	Communication driver	IP address	Rack	Expansion slot
S7-200 via PPI	SIMATIC S7 300/400	IP from S7-LAN	0	2
S7-300/400 via MPI/DP	SIMATIC S7 300/400	IP from S7-LAN	0	2
S7-300/400 via Ethernet-CP	SIMATIC S7 300/400	IP from PLC	0	2
S7-1200/1500 via Ethernet	SIMATIC S7 1200/1500	IP from PLC	0	1
LOGO! via Ethernet	SIMATIC S7 300/400	IP from PLC	0	1
S5 via PG port	SIMATIC S7 300/400	IP from S5-LAN++	0	2

As soon as you have configured your connection you will also can create variables within your panel project to read and write data from / to your controller.

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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+ Panel connection to S5-PLC over WiFi

QR-Code Website:



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

Sensor-networking 4.0

Siemens S5
Read / Write
PG-Schnittstelle



Siemens S7
Read / Write
MPI / MPI / DP





EtherSens
Analog IN / OUT
Digital IN / OUT

Energieanalyse
(EN 60475-1 EN 60475-3)
Electricity "Energy"
L1, L2, L3, N Echtzeitanalyse
bis 3000 Messungen / Sec
Spannungen bis 500 VAC
Strome über 1000 A
Hz / cos phi / Leistungsfaktor
WWh / Bld / Scheinleistung kW
Energieverbrauch kWh



Alle Messgrößen
U / I / CG / OZ / HZD, m, kg, m/s ...
dezentrale Analyse, Überwachen, Alarmieren
zentral protokollieren + beobachten

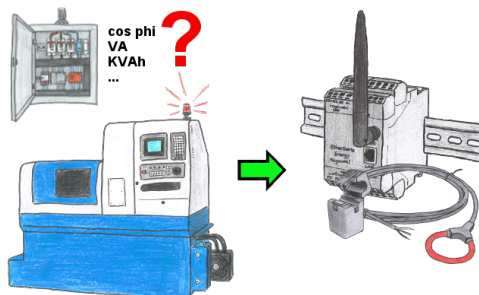
Vorhandene Sensoren direkt einbinden
analoge und digitale Ein-/Ausgänge
elektrisch und Messwerte frei konfigurieren
Messgrößen einfach über WEB abfragen

Klick-Montage auf Standard-Hutschene
Stromversorgung 230VAC / 24VDC

Integrierter Webserver
Zugriff auf alle Sensoren im Netz

Protokoll auf SD-Karte + FTP-Server
in verschiedenen Datenformaten
bei Grenzen E-Mail + Ausgänge über Netz

Energy-data acquisition



Do you also need the energy-consumption of your plant or need to determine the cos phi?
With the EtherSens Energy you can capture and record by using a Rogowski-coil or folding-core the required values.