



## Quick Start Guide

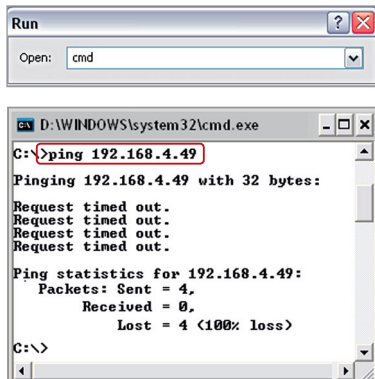
# NETLink PRO PoE

Version

1<sub>en</sub>

[www.helmholz.com](http://www.helmholz.com)

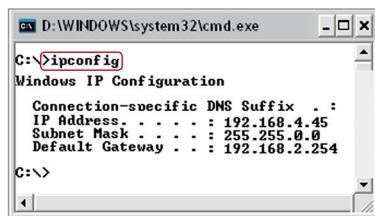
Power over Ethernet according to the IEEE 802.3af (PoE)  
and IEEE 802.3at (PoE+) standards.



**General Information:** The functions described here relate to a 32-bit Windows XP<sup>2)</sup> operating system (SP3).

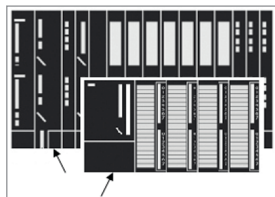
1. The NETLink® PRO PoE is shipped as standard with the IP address: 192.168.4.49 and the subnet mask: 255.255.0.0.  
If the NETLink® PRO PoE should be incorporated in an Intranet, check using the "ping" command at the command prompt (cmd) whether a network participant with this address already exists.

**Note:** First, ask your network administrator whether the default values are compatible with and freely available for your network.



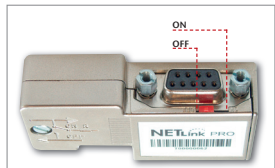
2. For the initial commissioning, we recommend a separate PC to NETLink® PRO PoE connection without integration in the company network.  
Using the "ipconfig" command, you can, e.g. easily display the settings of your LAN network card.

For the setting of the computer network card shown here, the IP address range is adapted to the default value of the NETLink® PRO PoE.

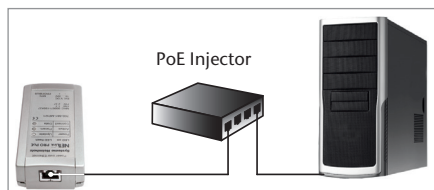


3. Connect the NETLink® PRO PoE to the MPI or PROFIBUS interface of your automation system. The required 24 volt is usually available at the bus interface.

Alternatively, the power supply can be established with an external 24 volt DC power source, or by means of a so-called Power Source Equipment (PSE) to transfer the required current via the CAT5 Ethernet cable.



The bus connector with PG socket enables the plugging-in of other bus participants. The terminating resistor must be inserted (ON) if the NETLink® PRO PoE is plugged in at the beginning or end of a bus segment. If this is not the case, the switch must be in the OFF position.

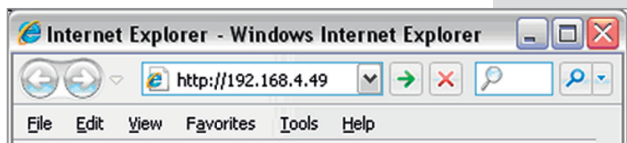


4. Connect the network port of your computer (LAN card) and the LAN socket of NETLink® PRO PoE with a CAT5 Ethernet cable. When using the Power over Ethernet function, the diagram shows an exemplary depiction of a standard PoE injector. The latter can also be installed in the LAN system in order to supply the NETLink® PRO PoE with 48 volt alternatively.

*If you cannot establish the "LAN connection", you must adapt the IP address of your computer. Carry out the steps A to D for this (overleaf).*

### 5. Accessing the integrated web interface:

Start your browser (Internet Explorer, Opera, Firefox,...) and input the following URL in the address line:  
http://192.168.4.49.



Afterwards, the user interface with the various sub-menus opens. In order to be able to make device-specific changes in the adapter, a security question must previously be confirmed.



Pay attention to uppercase and lowercase!

### 6. Input the following data for the now required login to the NETLink® PRO PoE:

**Pay attention to uppercase and lowercase!**

User name: NETLink PRO PoE

Password: admin

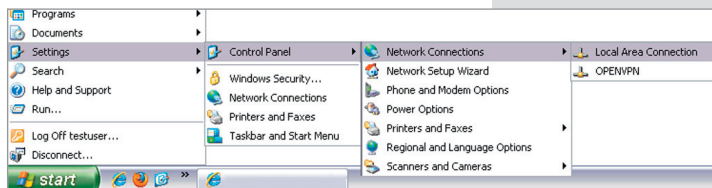
**Note:** Please note that the password should be changed after the setting up for the security in the web interface. This change is also possible for the user names.

NETLink Configuration		
<b>Device specific parameters</b>		
Device name	<input type="text"/>	
<b>TCP parameters</b>		
Static IP address	<input type="text" value="192.168.14.138"/>	Static parameters are used if DHCP is switched off
Static subnet mask	<input type="text" value="255.255.255.0"/>	Static parameters are used if DHCP is switched off
Static gateway	<input type="text" value="0.0.0.0"/>	Static parameters are used if DHCP is switched off

### 7. Now, for example, in the configuration screen of the device name, the IP address and the subnet mask of the adapter can be reconfigured and saved in the device. The NETLink® PRO PoE can then be accessed in the network using an IP address changed here.

**Note:** If the IP address is changed, the address range (subnet mask) of your computer must be adapted. See also steps A to D (overleaf). After you have made and saved the changes in the device, NETLink® PRO PoE restarts automatically.

- A) If you have to adapt the IP address of your computer to access the NETLink® PRO PoE, use the setting options of the network environment and carry out the following steps.



☐ Obtain an IP address automatically

☒ Use the following IP address:

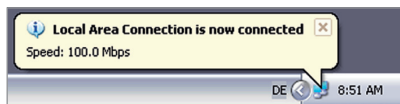
IP address:

Subnet mask:

Default gateway:

- B) Open the properties of your LAN connection for this (Start -> Control Panel -> Network Connections). You can adapt the IP address of your computer under the properties of the Internet Protocol (TCP/IP).

- C) The NETLink® PRO PoE is shipped with the IP address: 192.168.4.49. Therefore, you must assign the same address range to your computer. This applies not only for the IP address but also for the subnet mask.



- D) Your IP address must be in the address range "192.168.4.x" the subnet mask should be identical to that of the NETLink® PRO PoE (255.255.0.0).

In the case of a standard gateway and preferred DNS server, no entries have to be made. The "LAN connection" should be recognised after applying the settings.

Proxy server

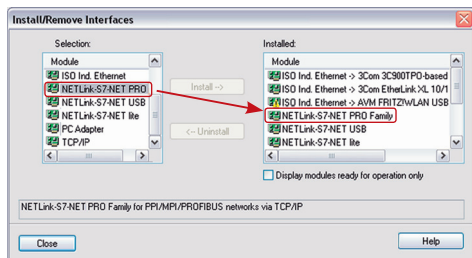
☐ Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).

Address:  Port:

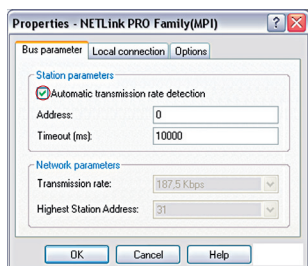
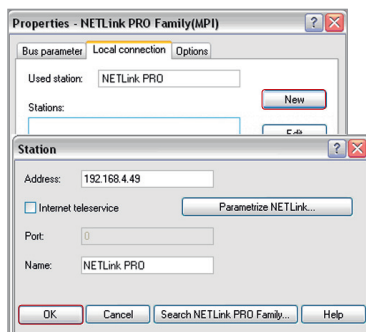
☒ Bypass proxy server for local addresses

**Note:** If your PG/PC is used in a network with proxy, it can be necessary that you have to deactivate the proxy server function in the configuration of your browser in order to be able to establish a connection to the NETLink® PRO PoE.

Continue with Step 1 to integrate the NETLink® PRO PoE in the PG/PC interface.



*Note: This step is absent at a Windows 7<sup>2)</sup> 32-bit operating system!*

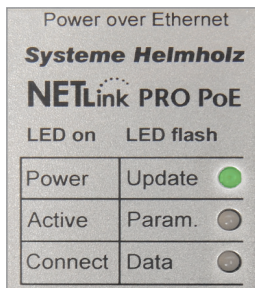


## *Integration of the NETLink® PRO PoE in the PG/PC interface of the Simatic<sup>1)</sup> Engineering Software:*

- I. Please install the NETLink-S7-NET driver from the enclosed CD or download the current version from the World Wide Web at [www.helmholz.com](http://www.helmholz.com).
  - II. You must add the interface NETLink-S7-NET PRO for the installation of the driver. Afterwards, the corresponding driver instances are available in the PG/PC interface.
  - III. In order to integrate the NETLink® PRO PoE in the PG/PC interface, open this and select the properties of "NETLink PRO Family".
- In the "Local Connection" tab, you can now add the adapter using the "New" button. You can input the IP and the name of the adapter manually or you can use the integrated search function of the driver.
- Click on the button "Search NETLink PRO Family..." for this. Your adapter is displayed in the list as an active station when you press the "Apply" and "Close" button.

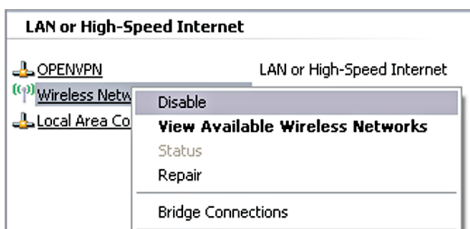
- IV. The access path to the connected controllers is now defined with this setting and it is possible to work with the Simatic<sup>1)</sup> Engineering Software.

***Note:** The "Automatic transmission rate detection" is active after the installation. There are also CPUs (or passive participants) which do not send any bus parameters. If this is the case, an error message is displayed during establishment of the connection and the network-related parameters must be adapted manually (clear checkmark).*



## LED description for the most important device functions:

<b>Power LED</b>	Is always on and indicates the general operational readiness. A flashing Power LED indicates a not present TCP/IP connection.
<b>Active LED</b>	Not active until the adapter has logged in successfully on the MPI/PPI/PROFIBUS.
<b>Data LED</b>	Usually in flashing mode (if a data exchange is taking place).



## Tips and tricks

If you cannot establish a connection despite correct configuration of all network parameters, it can be necessary to deactivate other network devices in the PC. (Relevant if these are in the same IP address segment of the LAN network card.)

## Information

Other helpful documents, descriptions and manuals can be found in the Download area at [www.helmholz.com](http://www.helmholz.com):

- Application examples with RFC 1006 (ISO on top of TCP/IP)
- Communications connection with the project-specific interface
- "NETLink® WebService" for creating own visualisations using HTML
- Examples for CPU-to-CPU communication

## Note

The content of this Quick Start Guide has been checked by us for the matching with the described hardware and software. Nevertheless, as differences cannot be ruled out, we cannot make any guarantee for the complete matching. However, the information in this Quick Start Guide is updated regularly. For the use of the purchased products, please observe in each case the most current version of the Quick Start Guide which can be viewed on the World Wide Web at [www.helmholz.com](http://www.helmholz.com) and can also be downloaded from there. Our customers are important to us. We look forward to receiving suggestions for improvement and other feedback.

<sup>1)</sup> Simatic is a registered trademark of Siemens AG. <sup>2)</sup> Windows XP/Windows 7 is a registered trademark of Microsoft Corporation.