

PC-Link Lite / PC-Link Extended

for network and for USB (serial)

With iPC-Link the Tecson display devices can be connected to a PC.

Such devices are:

- *Tank-Spion Digital LX-2 via USB*

- *LX-NET via network*

You can get the software PC-Link V4.20 (or newer) via CD or via internet download.

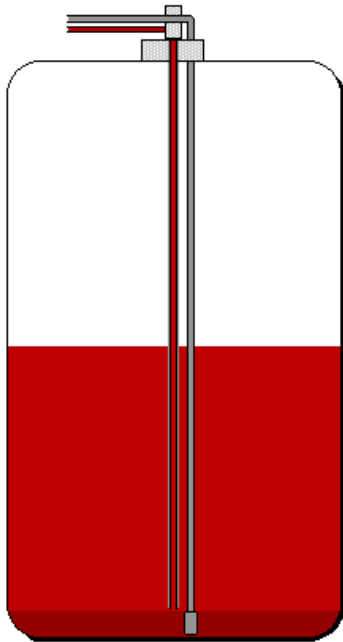
Before using the software it is necessary to buy and to enter a license key to get the program functions activated.



Inhalt:

1.	Product description :	2
2.	Requirements:	3
3.	Installation	4
3.1.	Device connection via network:	4
3.2.	Connection via USB serial port:	5
3.3.	Installation of PC-Link software:	6
3.4.	Program start and licensing:	6
4.	Program operation	8
4.1.	Main window	8
4.2.	Protocol function setting	9
4.3.	Email function setting	10
4.4.	Sending a manual Email	11
4.5.	Lock the Email setting	11
4.6.	Level displaying and analysis	12
5.	Uninstalling	13
6.	Device connection	14
6.1.	Network connection scheme	14
6.2.	USB serial connection scheme	Fehler! Textmarke nicht definiert.

1. Product description :



2540 Liters = 51.0 %

- . Device connection via LAN network or serial (USB).
- . Tank content display on the PC .
- . Display and analysis functions: level curve, consumption table, liters logfile.
- . Data transfer to any Email address.

PC-LINK is an extension set for the electronic level measurement systems by Tecson. The level data of one or several tanks will be transferred cyclically to a host PC.

The PC-Link program is running in the Windows task bar. It logs the level data of the measuring devices. Information emails or alert Emails can be generated and sent automatically via SMTP.

For displaying and analyzing the PC-Link main window has to be opened.

A) Device connection via serial line has to be done via a two-wire signal line to the **USB port**:

The LX-2q and X-litroq devices have a PC-Link direct output. For PC connection a special adaptor (line signal converter) is needed. Line length and diameter are not relevant.

Refer to 6.2 .

B) Device connection of LX-NET or X-litro netq device has to be done **via network** (Ethernet / LAN) .

The TECSON level display systems with NETq extension will transfer their level data directly via LAN to the target IP of the PC where PC-Link receives the data.

Refer to 6.1 .

PC-Link Lite

or

PC-Link Extended

1. The software **PC-Link Lite** is limited to handle a maximum of 4 devices.
The PC-Client function is not available in the Lite version.
2. The software **PC-Link Extended** is able to handle a maximum of 56 devices.
This version supports the remote access via PC-Client installations on PCs in the network (Intranet).
Therefore on the host PC the installed program folder has to be released (file sharing). Normally it is the folder C:\Program files\Tecson\PC-Link
The Software extension **PC-Client** has to be installed by using setup.exe.

2. Requirements:

- Windows® operating system and disc space

Windows® 64 bit system and 20 MB of free disk space.

- Automatic sending of Emails, if wanted

If you want to use the automatic sending of Emails, e.g. for alert or critical level message, the PC must have a permanent internet connection and should not be switched off. Set up the according SMTP parameter in menu item settings => Email function. Please ask your network administrator if necessary.

- Purchase and licensing

The PC-Link program is downloadable or can be copied.
For program using you have to buy a license key.
Follow the terms of our general business conditions.

3. Installation

3.1. Device connection via network:

➤ => Refer to 6.1


➤ After the installation of the tank display devices and connecting them via LAN you have to configure the IP addresses:
(Refer to device documentation!)

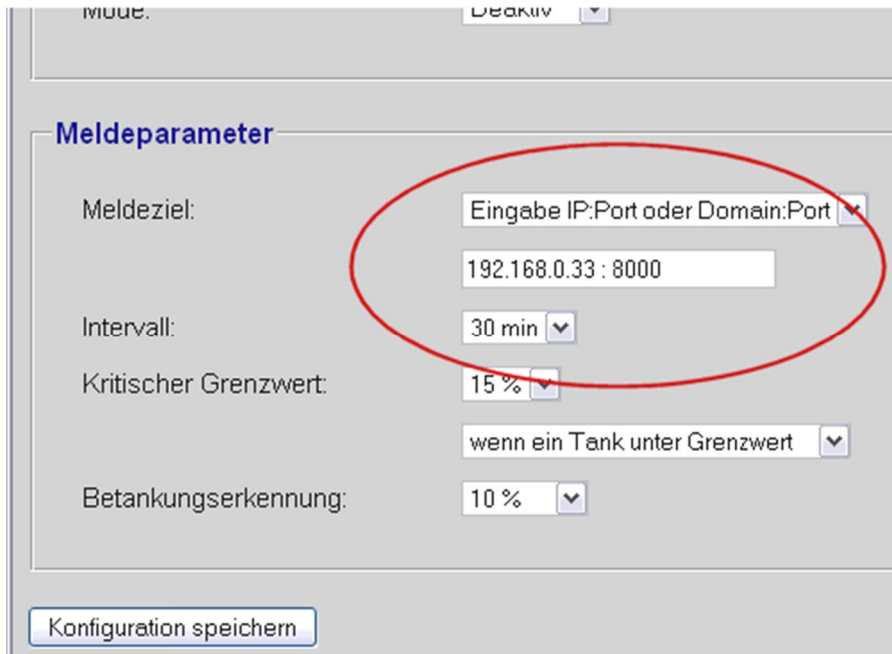
For the PC-Link host PC set up a fixed LAN-IP address.
(Please ask your network administrator if necessary.)

In each device set up the message destination via device menu item %5. NET% so the device cyclically sends the current level data to the PC-Link host PC:

- Device menu %5. NET% => Step through the menu items up to sDest.%
For destination select %P:Port%(Enter).
Set up the IP and the Port no. of PC-Link host PC, e.g.:
192.168.0.33:8000
- The messaging schedule of the device can be set up via browser.
Therefore enter the device IP into the browser address bar.:



Click the  button and enter password (default password = tank) to open the %Konfiguration+html page:



The screenshot shows a web interface for configuration. At the top, there is a 'MODE:' label and a dropdown menu set to 'Deaktiv'. Below this is a section titled 'Meldeparameter'. It contains several fields: 'Meldeziel:' with a dropdown menu showing 'Eingabe IP:Port oder Domain:Port' and a text input field containing '192.168.0.33 : 8000'; 'Intervall:' with a dropdown menu set to '30 min'; 'Kritischer Grenzwert:' with a dropdown menu set to '15 %' and a text input field containing 'wenn ein Tank unter Grenzwert'; and 'Betankungserkennung:' with a dropdown menu set to '10 %'. At the bottom of the section is a button labeled 'Konfiguration speichern'.

Set up the messaging schedule on that page.
In case of heating oil tanks a messaging schedule of 10 minutes is recommended. In case of service tanks an even shorter interval is recommended.

Click %Konfiguration speichern% to save your setup.

ALTERNATIVELY:

3.2. Connection via USB serial port:

➤ => Refer to 6.2

➤ Use 2 x 0.4mm² or a telephone line for connection to PC.
In case of interferences use shielded wire and connect it to earth potential (ground).
Wire length may be of 100 meters or more.
Resistance does not matter.

For connection to PC use USB link adaptor.

Serial Link-Output clamp1 to line colored red or blue or white .
Serial Link-Output clamp2 to line colored brown or black.

➤ For the USB adaptor a Windows driver is necessary.
Refer to the ZIP download or the CD archive.

➤ At PC-LINK menu item **Settings** select the right COM-Port for access to the USB adaptor.



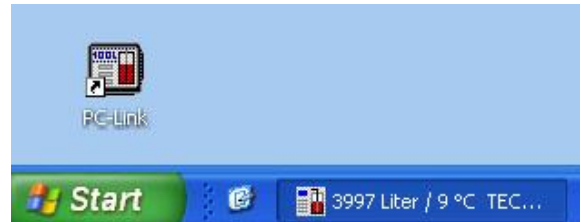
3.3. Installation of PC-Link software:

- For installing the PC-Link software open the archive file and run SETUP.EXE out of folder deutsch or folder english
- Follow the instructions of the SETUP procedure.

3.4. Program start and licensing:

- The installation program saves a notice for the autostart of PC-LINK in the Windows®-system. PC-Link starts minimized as a symbol in the bottom tool bar. The user should not close the program but only minimize it.

If you do not want this autostart-function remove the PC-Link entry from autostart folder.



- License the PC-Link software as the next step. Without buying and entering a valid license key all PC-Link program functions are disabled. Open the menu item %Setting => Licensing% and unlock the program by following instructions.

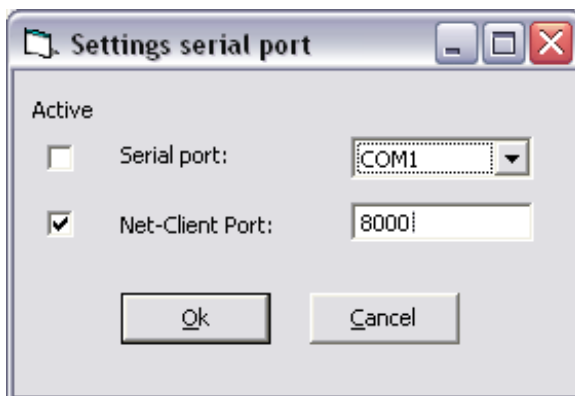
LITE or EXTENDED version ?

When ordering the license key you define the type of it (LITE or EXTENDED). For differences refer to 1. Product description.

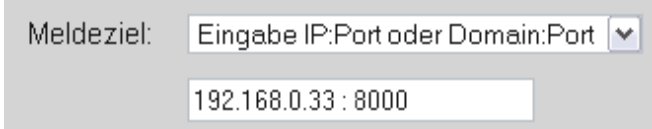
- **Define kind of communication:**

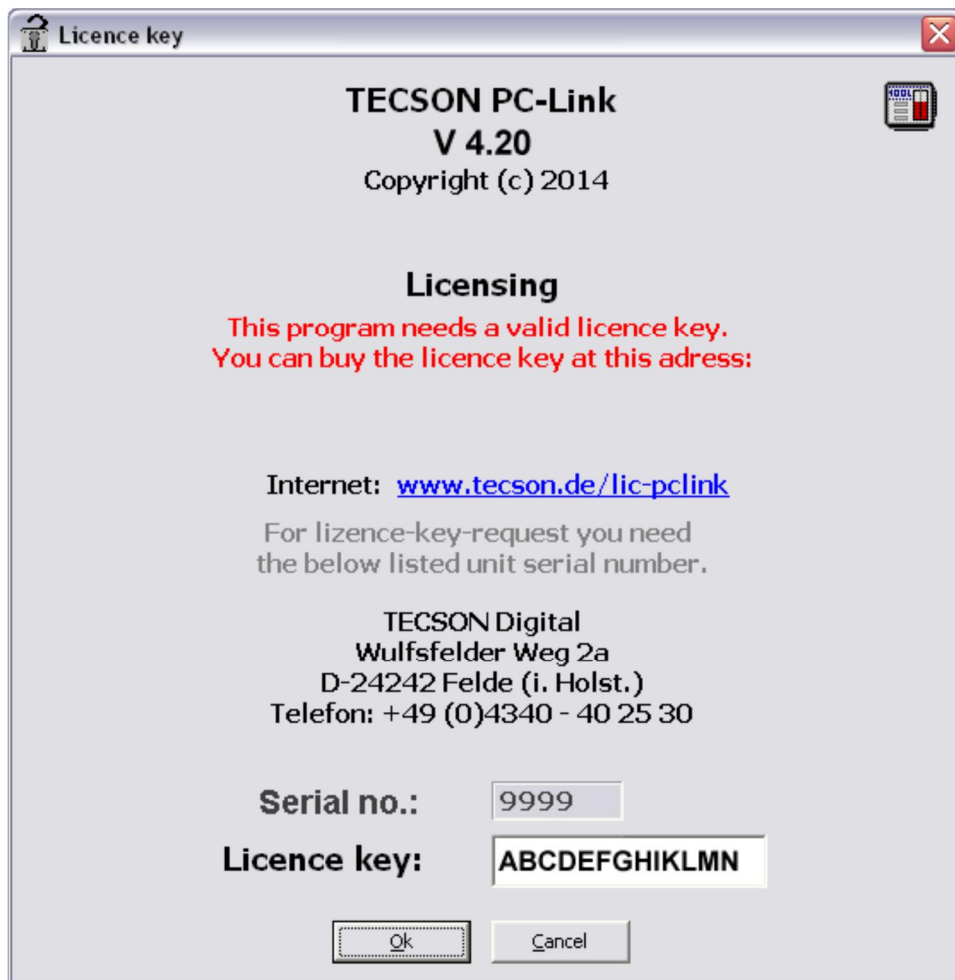
In case of serial connection select the right COM port (refer to figure).

In case of network connection enter the Net-Client port. Refer to 3.1, e.g. port no. 8000.



Corresponding setup by browser on device page %Configuration%





➤ **Buying the license key**

Click at the hyperlink www.tecson.de/lic-pclink to open that browser page.

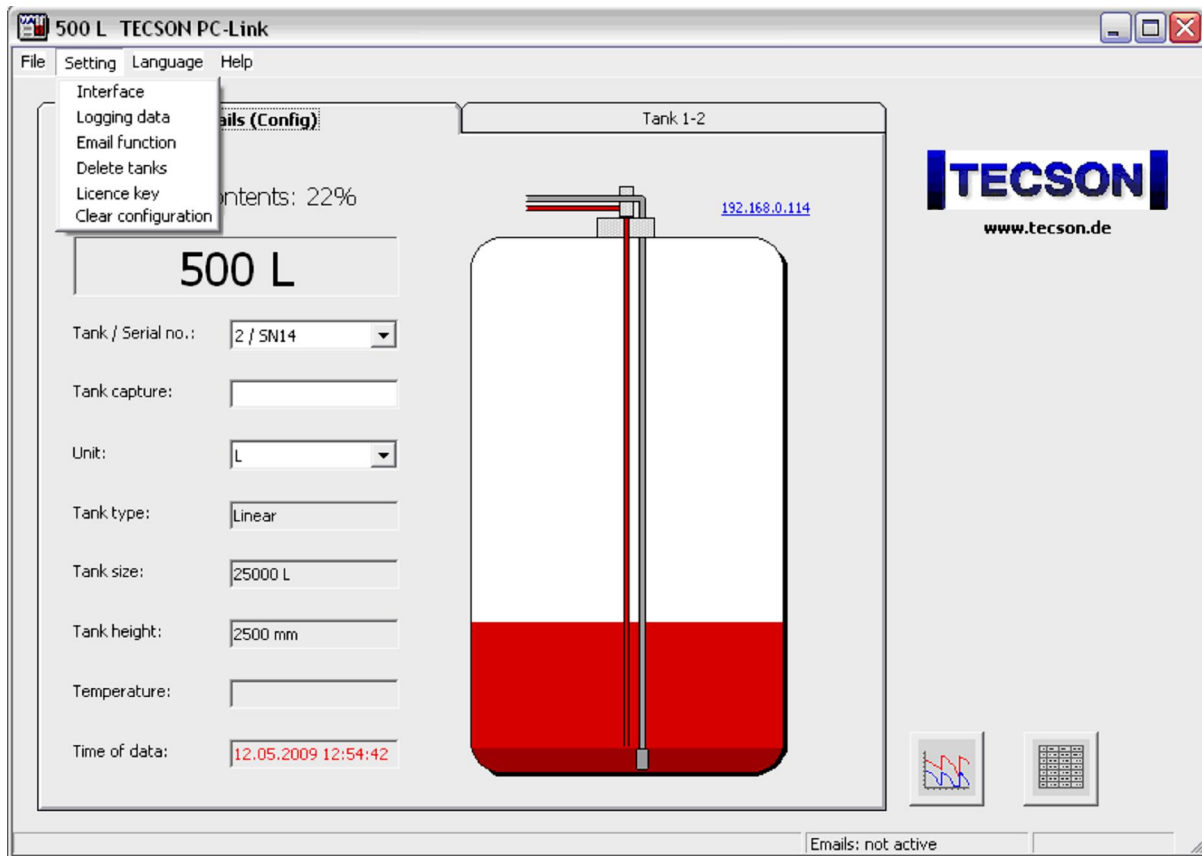
Specify the serial no. to order the license key.

For example serial no. %9999%
Displaying the serial no. information takes some time (up to 30 minutes) depending on the messaging schedule.

➤ **Respect the terms of our general business conditions for buying and using our software.**

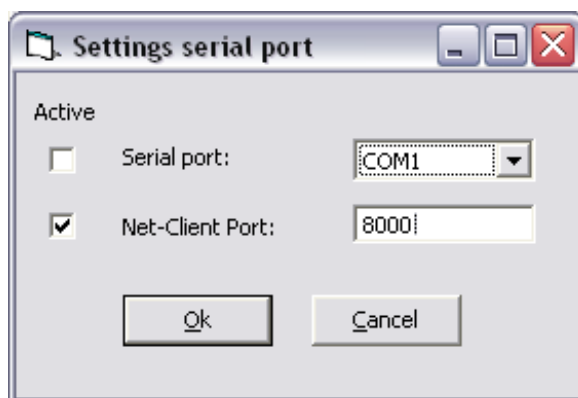
4. Program operation

4.1. Main window



- The main window updates the level values every few minutes.
Conditions:

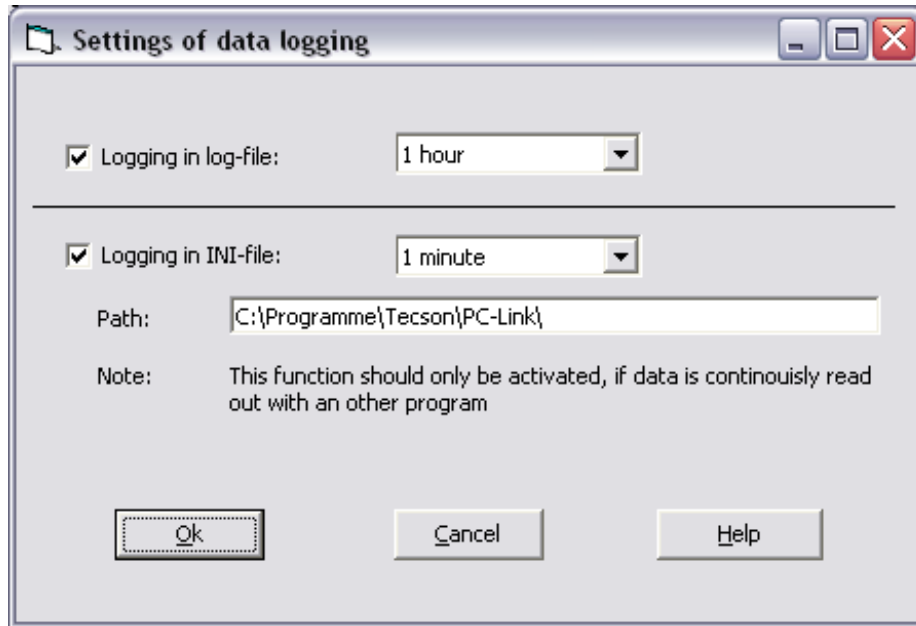
1. Proper setup of network parameters (refer to 3.1)
or proper COM port setup (refer to menu settings => interface).



2. Entering of a valid license key for LITE or EXTENDED version.

- For the one or more tanks set up the parameters once. Refer to figure above.
Use the selection box to switch to parameter setup for each tank.

4.2. Protocol function setting



➤ Protocol in logfile

If this function is activated PC-LINK writes the measurement data into an ASCII logfile. The file name is $\#$ Tank nnn.csv± (importable e.g. with EXCEL). In case of several connected tank display devices the according number of files is created.

➤ Protocol in INI-file (also necessary for PC-Client)

This setting is important for the use of PC-Client on remote PCs.

Only if this function is activated the up-to-date tank content data is written into the PCLINK.INI file as volume=nnnn for the tank(s).

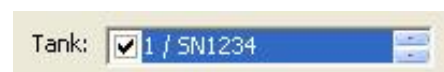
PC-Client.exe on the network PCs reads the data from the host PC. Network accessibility has to be set for the folder, so release the folder for file sharing.

Refer to the figure above.

4.3. Email function setting

This automatic Email function requires having permanent Internet access. If necessary, please ask your system administrator for parameter values.

- The entire Email function can be temporarily de-activated with the function **Activation**.
- With the **activation list** individual tanks, e.g. a rain water tank, can be excluded from the Email function.
- The Email recipients are to be entered into the fields **Email address 1** and **CC**.
- Enter the mail server address in field **SMTP Mail Server**.
- Enter the port number (587) in field **SMTP Port**.
- **STARTTLS** activates the STARTTLS function.
- If a login is necessary, activate **Login** and enter **User** and **Password**.



- No entries are to be made in the subject line.
This line shows what the subject line in the Email will look like.

- **Cyclical and critical message threshold**

In this segment the messaging threshold and the repetition rate are to be set.
A cyclical message will be sent if one of the two criteria is met.
In addition a threshold message will be sent if the filling level falls below the adjusted threshold.
The parameter at the bottom right indicates the repetition rate of this message.

- The fields **Customer** to **Comment** are copied in the email body.

4.4. Sending a manual Email

- By clicking the send manual Email button an Email will be sent now.
- The entered threshold values and intervals for the automatic sending remain irrelevant in this function.

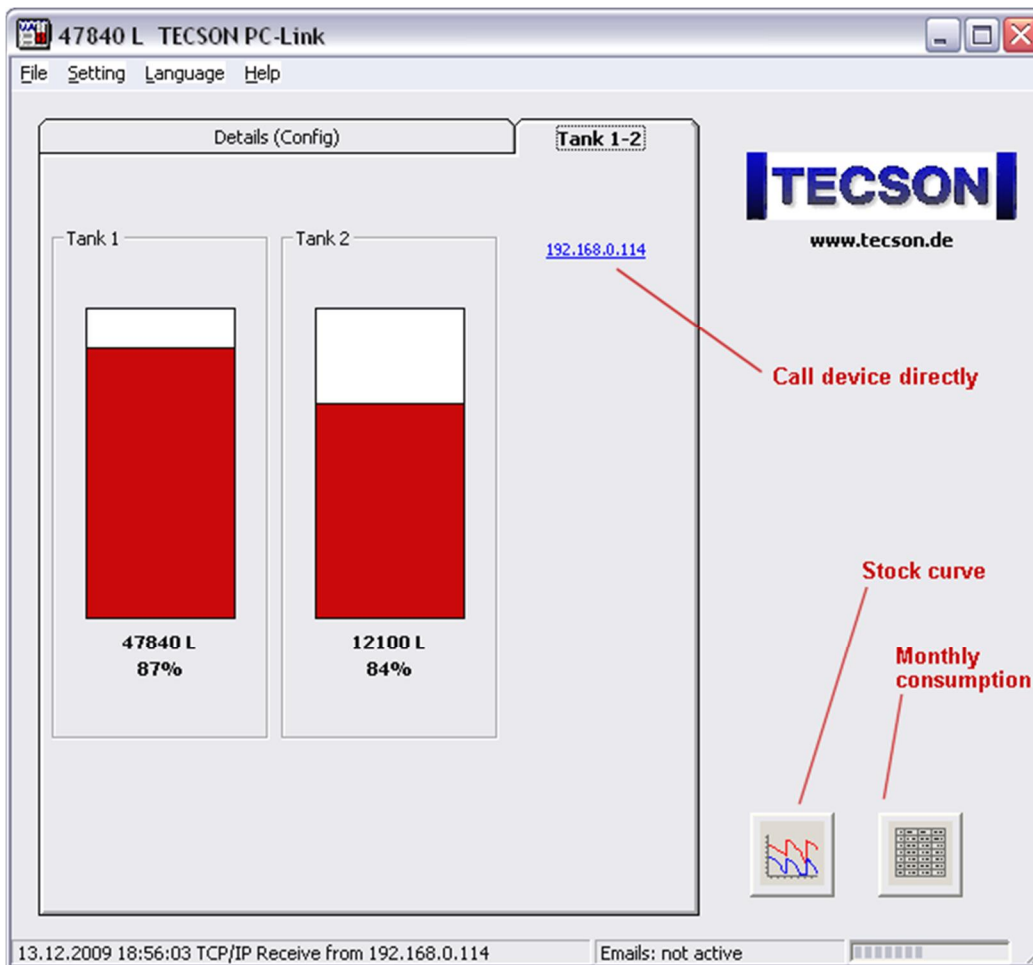


4.5. Lock the Email setting

- The entire settings for the Email function can be protected by a password.
- By clicking the Lock/Unlock button a window appears with the prompt to enter a password.



4.6. Level displaying and analysis



➤ **Level displaying of tanks**

Use the tabs in the main window for displaying the reporting tanks.
To request the level displaying devices use the blue hyperlink (refer to figure).

➤ **Analysis of monthly consumption**

Refer to red hints in figure above.

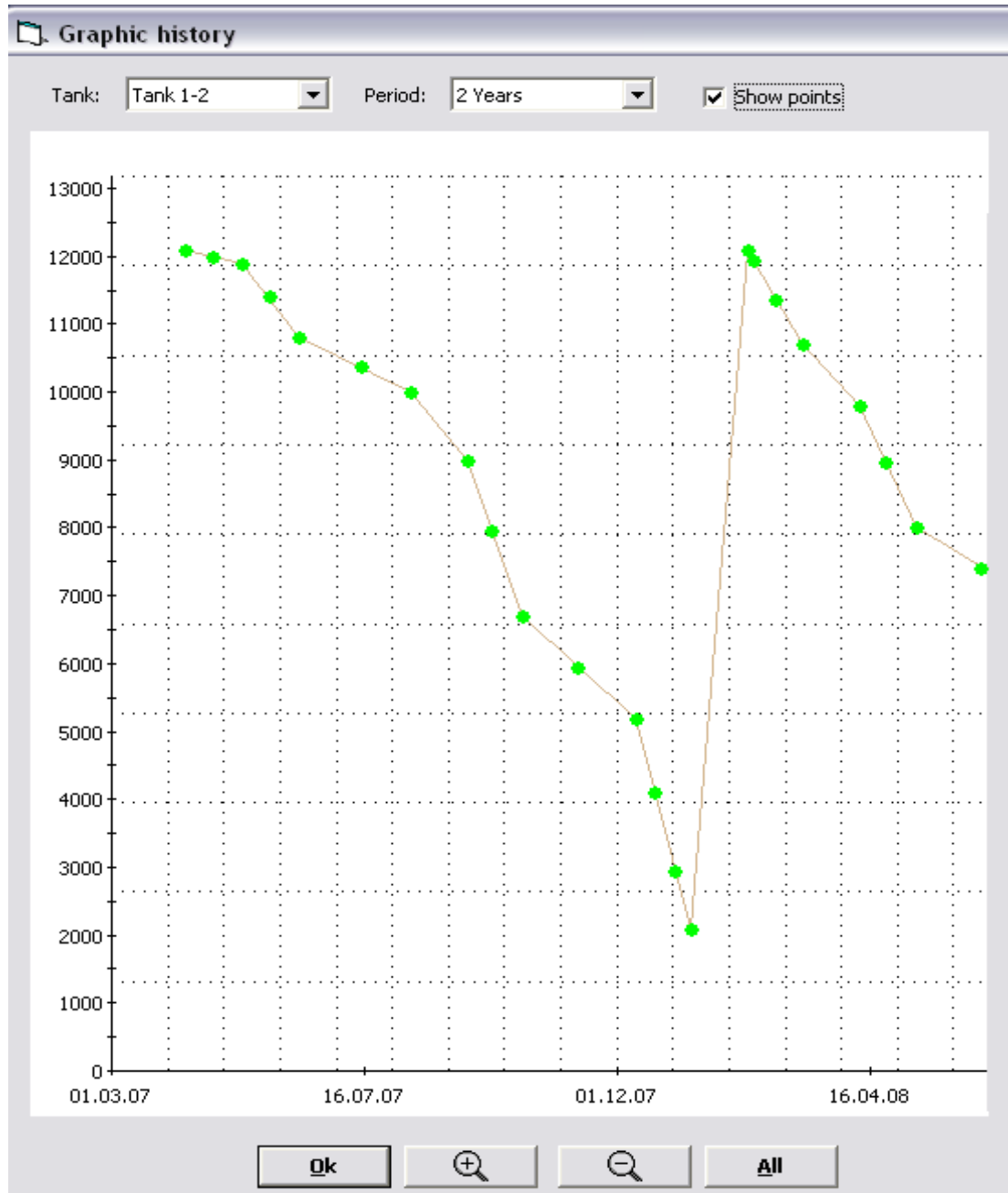
Monthly consumption

Tank: Tank 1+2

Consumption table														
Year	Jan	Feb	Mar	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez	Sum	
2009	2.900 L	500 L	800 L	3.280 L										7.480 L
2008	1.250 L	1.400 L	2.000 L	1.800 L	900 L	0 L	20 L	210 L	220 L	280 L	930 L	1.300 L	10.310 L	
2007				200 L	1.100 L	810 L	90 L	900 L	1.300 L	1.500 L	1.000 L	3.100 L	10.000 L	
Sum													27.790 L	

Ok Export

Stock analysis



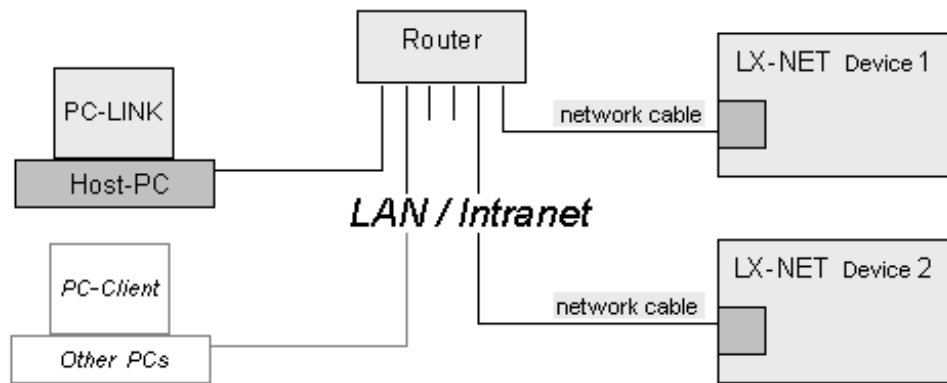
Refer to red hints in figure 4.6 .

5. Uninstalling

- For uninstalling the PC-Link software call system control panel and run `uninstall` application

6. Device connection

6.1. Network connection scheme



6.2. USB serial connection scheme

