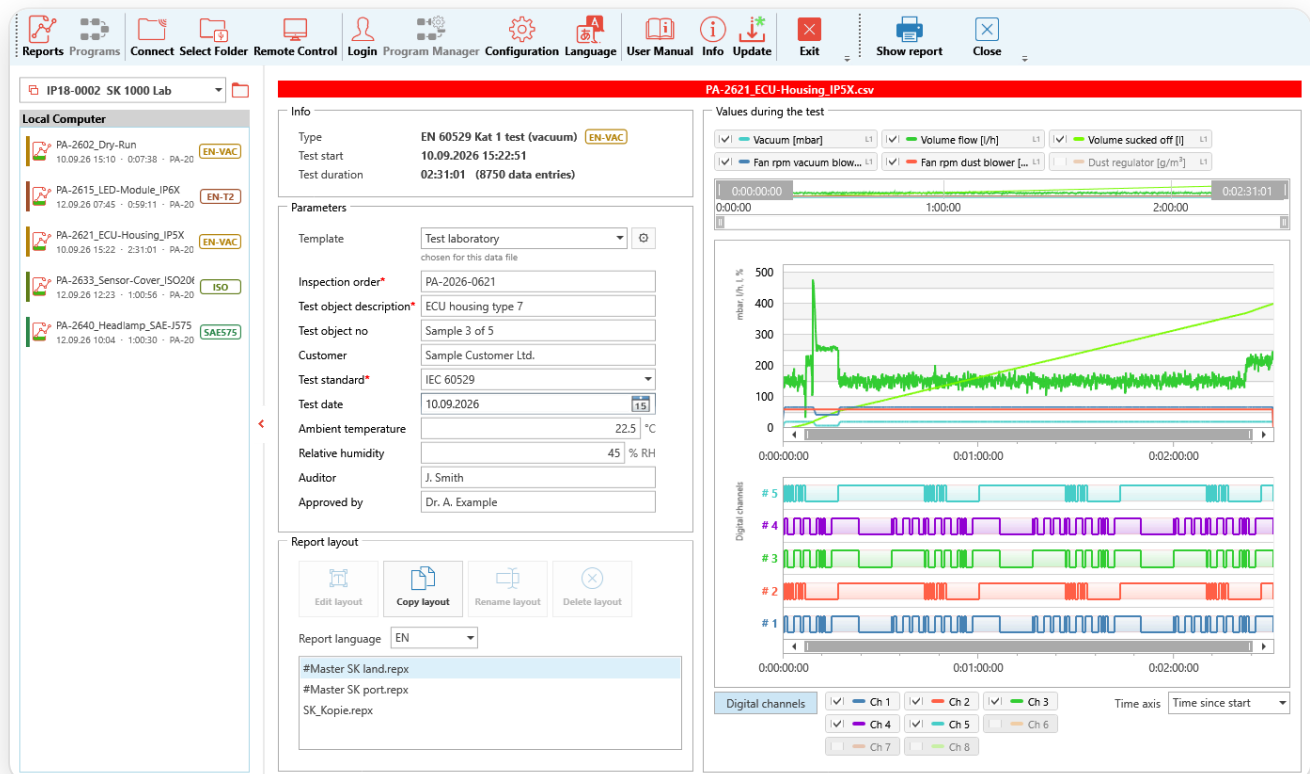


MANUAL

iTS Companion

Operating the software from version 4.0



MANUAL

Contents

1	Overview of functions	3
1.1	Demo version	3
1.2	Basic license	3
1.3	Pro license	3
1.4	Pro Plus license	3
2	Requirements	5
2.1	At the machine	5
2.2	On the PC	5
2.3	Machine software	5
3	Installation	6
3.1	Installation package (setup)	6
3.2	Program copy (ZIP archive)	7
4	First start and license	8
4.1	Splash screen and license check	8
4.2	Demo version	8
4.3	Requesting a license	9
4.4	Loading the license	11
4.5	Extending the license	11
5	Update	12
6	Uninstalling	13
7	Setting up	14
7.1	User interface language	14
7.2	Network	14
7.3	Adding and managing machines	15
8	Getting measurement files from the machine	20
8.1	Via USB stick	20
8.2	Via the network	21
9	Creating reports	22
9.1	Getting files onto the PC	22
9.2	The file list	24
9.3	Entering header data	25
9.4	Header templates	27
9.5	Curves and time range	31
9.6	Adjusting curves	32
9.7	Digital channels	34
9.8	Showing and exporting the report	34
10	Remote control of a machine	36
10.1	Connection loss and reconnecting	37
11	Programs (recipes)	38
11.1	Getting programs from the machine	38
11.2	Editing programs	39
11.3	Saving and transferring to the machine	40
11.4	Write protection and access rights	41
12	Program Manager	42
13	Manual, info and help	43
13.1	Privacy	43
13.2	Unexpected error	43

CHAPTER 1

Overview of functions

iTS Companion is an add-on application for the office workstation. It provides various functions for the following machine types (series) of iTS GmbH:

- **SPK** – spray water chamber
- **SRA** – oscillating tube systems and room solutions
- **SK** – dust chamber (from summer 2020)
- **SWK** – surge water chamber (from summer 2020)
- **DWT** – pressure water jet chamber, similar to SPK
- **TK** – dripping chamber, IPX1/IPX2
- **TT / WVM** – immersion tank and water supply module

Which parts of the program are available depends on the license.

1.1 Demo version

Without a valid license, Companion runs as a demo version. The basic functions can be tried out with the sample data supplied.

1.2 Basic license

Report generator for recorded tests (offline). The data recorded during a test is copied to a USB stick at the machine. On the PC, a test report is created from it with all available test parameters; the recorded actual values are shown as curves.

1.3 Pro license

- **Report generator (offline and online)** – via a network interface, Companion fetches the data directly from the machine and creates the test report with one click. The route via the USB stick remains possible.
- **Program editor** – prepare test programs (recipes) with all parameters on the PC and transfer them directly to the machine control. As of V4.0 for SPK, SRA and DWT.
- **Remote control** – watch the machine from the office workstation and operate it fully by remote control.

1.4 Pro Plus license

Everything in the Pro license plus the **report designer**: with it you adapt the supplied layouts to your company – cover page and company logo, selection and arrangement of the test parameters, chart pages, headers and footers. Individual fields can be shown or hidden depending on the equipment of the machine and the type of test.

The Pro Plus license comes with its own instructions for the report designer. If you are interested, please contact us: support@its-gmbh.de

CHAPTER 2

Requirements

2.1 At the machine

- The machine must be equipped with **data recording** (option OP200). This is usually an option at extra cost that can be retrofitted.
- For the connection via the network (Pro license), the operating panel also needs **its own network interface** (option OP210).
- Data recording must be **switched on before the test**. Tests without recording cannot be evaluated because no data was stored.

2.2 On the PC

- Windows 10 or 11 (at least Windows 7).
- Microsoft .NET Framework 4.7.2. It is loaded automatically during installation; an internet connection may be needed for this. Without internet, you can also download the .NET Framework from Microsoft beforehand and install it by hand.
- For the data transfer either a USB stick or a network connection to the machine (Pro versions only).

2.3 Machine software

- Spray water chambers SPK and room solutions SRA need at least software version 5.x; older machines may not yet supply all the information required.
- Dust chambers SK should have firmware V6.1 or higher. Earlier versions (before 2020) are not compatible.
- Machines with the new control generation (CDS, partly from 2026) are connected via an encrypted SFTP connection. The machine search recognises the control system automatically and enters the matching connection data.
- Machines built before 2020 should first be checked with sample data; in most cases they can be upgraded (iTS service).

Please contact us if you are not sure whether your machine meets the requirements.

CHAPTER 3

Installation

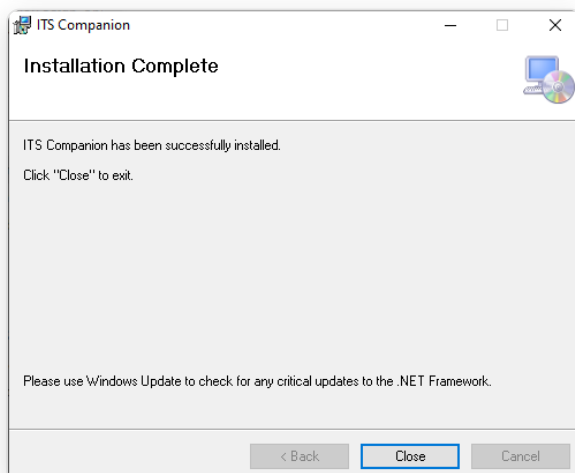
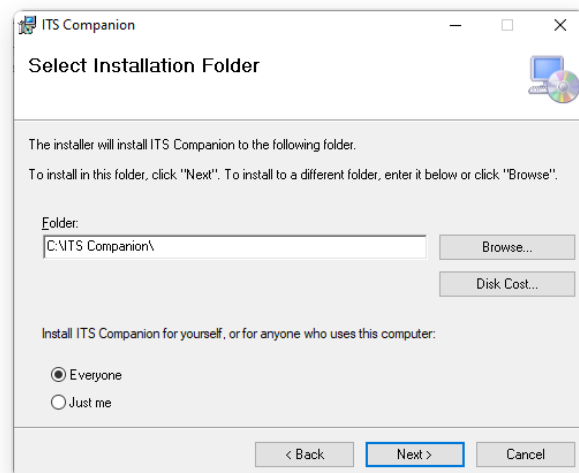
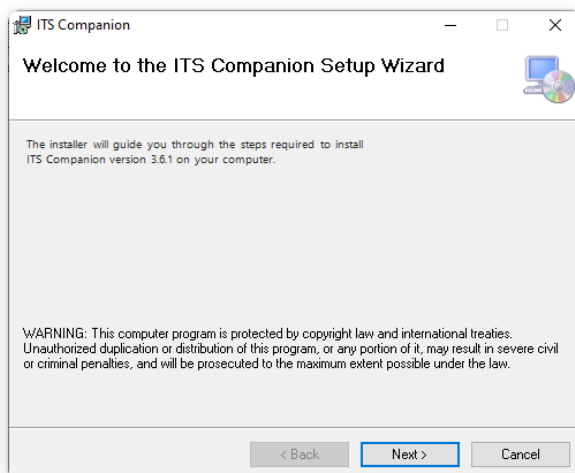
There are two ways to put Companion on a PC: with the installation package or as a copy of an existing program folder.

3.1 Installation package (setup)

You can also find the current version at this link:

<https://its-gmbh.de/wp-content/companion-app/ITS-Companion-v4-Install.zip>

1. Unpack the ZIP file into a folder: right-click › **Extract All**.
2. Double-click `Setup.exe` to start the installation. It sets up the application with all required components. The installation runs in English; you switch Companion itself to your language later.
3. Under **Browse** you choose the installation folder and whether all users of the PC get access. We recommend the suggested path `C:\ITS Companion\`.
4. The installation then runs by itself and may ask for the administrator password.



**INFO**

The later user needs write access to the installation folder, because Companion also stores its data there: next to the program files, a subfolder is created for each machine with all files and settings of that machine. Therefore choose a drive on which you have unrestricted write access.

3.2 Program copy (ZIP archive)

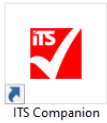
An existing program folder – from another PC, as a copy or as a backup – can be copied to any location or to another PC and runs there without installation, as long as the whole folder was transferred. Missing Windows or .NET components are normally loaded automatically at the first start if there is an internet connection.

**CAUTION**

The license file is assigned to one particular PC and is not valid on another. Each PC needs its own license, see *chapter 4*.

CHAPTER 4

First start and license

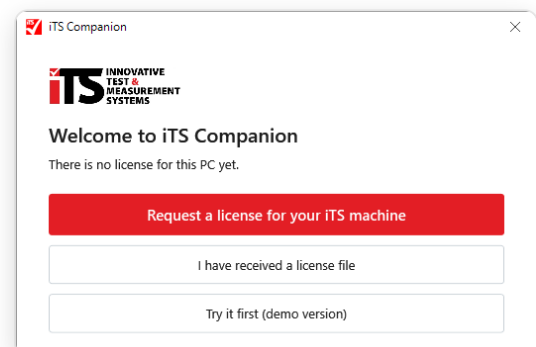


After the installation, start the application as usual via the icon in the Start menu, on the desktop or in the installation folder (ITS Companion.exe).

4.1 Splash screen and license check

While the program starts, a splash screen shows the version number, the licensed edition, the licensee, the expiry date and the hardware ID of your computer. Without a valid license it shows DEMO. If a license file is present but not valid for this computer, the details appear in red. The splash screen closes by itself after a few seconds; a click into the picture, the space bar or Escape makes it faster.

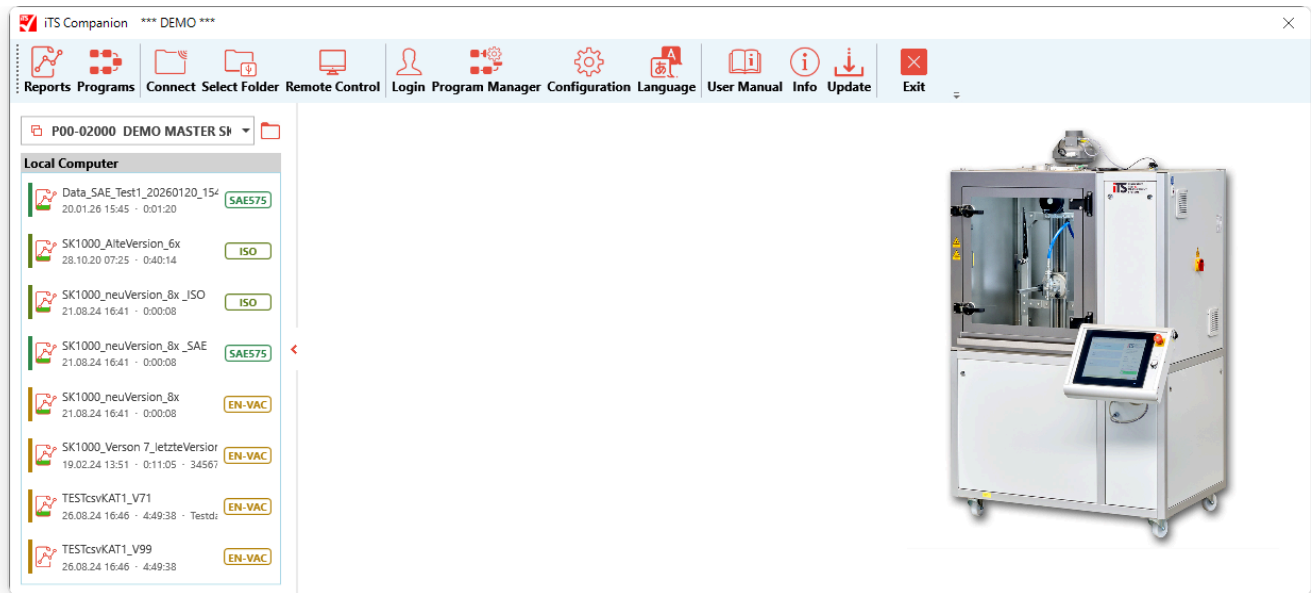
If Companion finds no valid license, the window **Welcome to iTS Companion** opens with three ways: **Request a license for your iTS machine**, **I have received a license file** or **Try it first (demo version)**. If you close the window with the cross, Companion is closed.



4.2 Demo version

The demo version is marked *****DEMO*****. It contains machines with data recordings whose reports can be generated; they carry the watermark "Demo". **A connection to a machine is not possible**; remote control only shows a sample picture.

From within the demo version, the **Configuration** button opens the three ways to a license again at any time.



4.3 Requesting a license

The license is issued for your iTS machine. After **Request a license for your iTS machine**, Companion therefore first asks for the serial number of the machine. There are three ways to do this, all leading to the same result:

- **Search the network** – if the machine is switched on and in the same network as your PC, Companion finds it, sets it up as a machine straight away and takes over the serial number.
- **Read from USB stick** – for machines without a network connection. Plug a USB stick into the machine; it copies its measurement files and settings onto it by itself. Then plug the stick into the PC, and Companion reads the serial number from the files.
- **Enter serial number by hand** – the serial number is on the type plate of the machine under “Machine-no.” and begins with P, e.g. P25-02004. It is also given in the order confirmation and on the delivery note.


Request a license

Your iTS machine

For the license, Companion needs the serial number of your machine. Choose one of the three ways – they all lead to the same result.

Search the network

For machines with a network connection – Companion finds the machine and sets it up straight away.

- The machine is switched on and has finished starting up.
- Machine and PC are on the same network (company cable or Wi-Fi, not guest Wi-Fi).
- Machines with a Basic license have no network connection – please use the USB stick instead.
- If Companion finds nothing, a firewall may be blocking the search – ask your IT department or choose another way.

Read from USB stick

For machines without a network connection (e.g. with a Basic license):

1. Insert the USB stick into the machine – the machine copies its measurement files and settings onto it automatically. Wait until copying has finished.
2. Remove the stick and insert it into this PC.
3. Click "Read from USB stick" – Companion looks for the serial number in the files. Nothing on the stick is changed.

Older machines do not write the serial number – then please enter it by hand.

[Choose stick or folder yourself ...](#)

Enter serial number by hand

 CE	
Product name:	Dust chamber SK2000-Q
Machine-no.:	P25-02004
Supply voltage:	230/400V 3~ 50Hz
Year of construction:	05 / 2025

The serial number is on the machine's rating plate under "Machine-no." (on German plates "Maschinen-Nr.") and starts with P, e.g. P25-02004. It is also on the order confirmation and the delivery note.

I don't have a machine

Only for iTS employees, representatives and service: an installation without its own machine, e.g. for demonstrations, training or on a service laptop. As a customer, please choose one of the ways above.

Cancel

Then fill in four fields: **Your name**, **Company**, **E-mail** and **Serial number of the iTS machine**. With + **another machine** you add further machines. Everything else, e.g. the hardware ID of your PC, is entered by Companion itself.

Create request creates a request file and opens a message to support@its-gmbh.de in your e-mail program with the file attached. You only have to send it.

If no e-mail program can be opened, Companion shows where the request file is; then send it from any computer to support@its-gmbh.de. Until the license arrives, you can continue working with the demo version.


Request a license

Request a license

Please fill in the four fields. Companion adds everything else itself.

Your name *

John Smith

Company *

Example Test Lab Ltd.

E-mail *

jsmith@example.com

Serial number of the iTS machine *

P25-01234

Shown on the machine's rating plate under "Machine-no.", e.g. P25-02004 – also on the order confirmation and the delivery note.

[+ another machine](#)
[Search network for machine](#)

Details: what is sent

iTS uses your details only for your license. [Privacy](#)

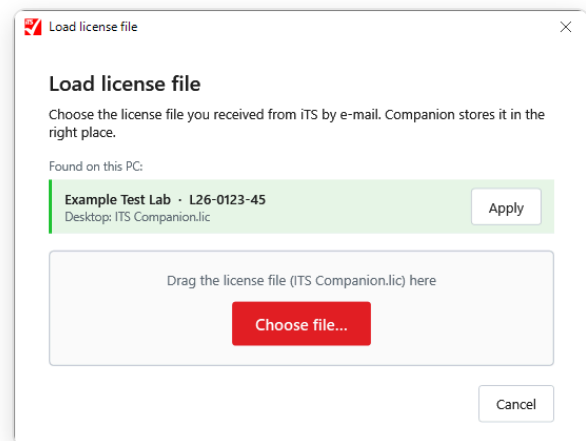
Cancel

Create request

4.4 Loading the license

You receive the license by e-mail as the file `ITS Companion.lic`. Save the attachment, e.g. on the desktop or in the Downloads folder, and choose **Load license file...** in the configuration window or **I have received a license file** when the program starts.

Companion looks for the license itself on the desktop, in the Downloads folder and in the clipboard. You can also select the file with **Choose file...** or drag it into the window.



With **Apply**, Companion places the license in the right location in the installation folder; an existing license file is backed up. If a license does not match this PC, Companion states the reason. If you received the license as a long string of characters, copy it to the clipboard – Companion finds it there as well.



CAUTION

The license is assigned to your computer. If you replace central components of your PC, its hardware ID changes and the license becomes invalid. In that case request a new license as described above.

4.5 Extending the license

If you extend your license, e.g. from the Basic to the Pro version, you receive a new license file from us. Load it in the configuration window with **Load license file...**; Companion then restarts by itself so that it takes effect.



INFO

The license guide describes all license windows step by step, in eight languages. Open it in the configuration window via **Info** in the **License** area.

CHAPTER 5

Update

If the PC is connected to the internet and an update is available, a green star on the **Update** button indicates this. A click on it shows which version is installed and which is available.



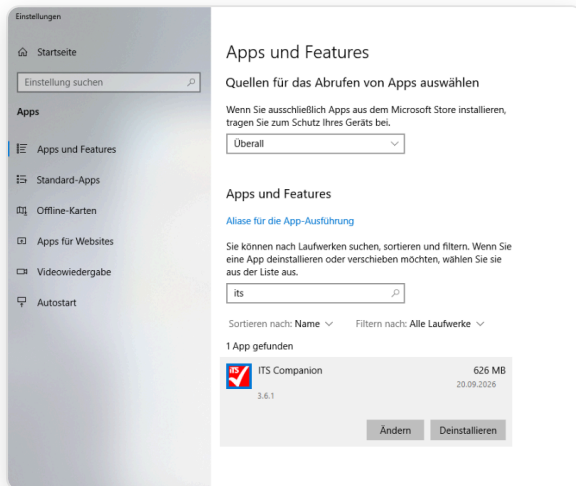
If you confirm, Companion is closed and a temporary folder with `setup.exe` and `ITS Companion Setup.msi` opens. Start the update via `setup.exe` like a normal installation. Settings and data of the previous version are not overwritten, your license remains valid.

- From version 3.5.4, the setup removes the previous version automatically during the update; uninstalling by hand is no longer necessary.
- Make sure you choose the existing installation folder. From V3.6 the setup suggests it itself – check it nevertheless.
- From version 4.0, Companion takes over your personal settings from the previous version at the first start of a new version, e.g. language, window position and the machine selected last.

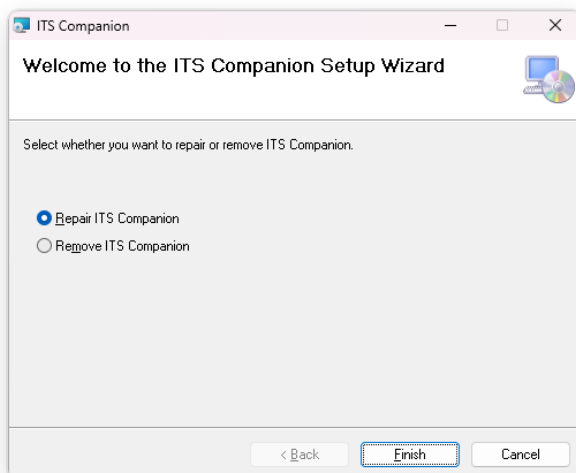
CHAPTER 6

Uninstalling

To uninstall, use **Apps > Installed apps** (or **Add or remove programs**) in the Windows settings. Older versions of Companion that are no longer used may also be listed there and can be removed. This only applies to installations before version 3.5.4; newer setups remove their previous versions themselves.



If you still have the setup program, you can also start it and choose **Remove iTS Companion**.

**INFO**

Machines you have set up, their measurement files and reports remain in the installation folder, as does the license – until you delete the folder yourself. If you only delete the folder `C:\ITS Companion\`, the entry in the Windows apps remains until you uninstall Companion there.

CHAPTER 7

Setting up

7.1 User interface language

In the upper menu bar you find the **Language** button. You can choose Deutsch, English, Français, Italiano, Español, Português, Polski and Čeština, each with its flag.

After your choice, Companion asks for confirmation in the previous and the new language. With **Restart** the program restarts by itself and appears in the chosen language.

**INFO**

You choose the language of the reports for each measurement file under **Report language**, independently of the user interface language ([section 9.3](#)). The manual is available in German and English. Print preview and report designer appear in English for French, Italian, Portuguese, Polish and Czech.

7.2 Network

The machine always has internal network ports, but they do not allow the connection parameters to be changed and are therefore not suitable for connecting to your company network. For this, the operating panel needs an **additional network card**, which is offered as an option for the Pro version and can usually be retrofitted.

This port is connected to your network with an Ethernet cable. It gets a fixed IP address or an address from your network via DHCP. How to set up the port on the operating panel is described in the operating instructions of the machine.

- Files: FTP on port 21; machines with CoDeSys control use SFTP on port 22.
- Remote control (Pro only): VNC on port 5900.
- Companion checks whether a machine can be reached directly via these ports. A ping is not needed and may be blocked in the network.

If in doubt, check with your IT department whether such connections are possible in your network.

7.3 Adding and managing machines

To use Companion, add at least one machine. For each machine, a folder of its own is created below the program folder with all files and settings. Name and location of this folder cannot be changed. You can copy any machine folder as a backup; copied back into a program folder – also on another PC – Companion recognises it at the next start and it is available again immediately.

With the Pro version you can add as many machines as you like. Per program window only one connection is active at a time.



INFO

You can start Companion several times and so use different machines at the same time, e.g. watch one machine via remote control and create reports in the second window. All windows work on the same data; the other window may only see changes after a change of machine or a restart.

7.3.1 Adding a machine by hand

The **Configuration** button in the menu bar opens the configuration window. With **Add Machine** you create a new entry:



- **Label** – a name of your choice.
- **Serial number** – the project number of the machine from the type plate, e.g. P24-01940. It appears in the machine selection in front of the label, the list is sorted by it, and it appears in the header of every

report. The same serial number may occur more than once, but the combination of serial number and label must be unique.

- **Type** – the machine type. The **Control system** is preset to match and determines the transfer: Windows CE and PC Platform use FTP, CoDeSys TX uses SFTP.
- **Connect via** – IP address or host name of the machine. The host name is preset to ITSPANEL and must match the network name of your operating panel. After the first successful connection, Companion adds the other entry if your network resolves names. Because name resolution often fails in company networks, use the IP address if in doubt.
- **FTP-User** and **FTP-Password** remain empty as long as nothing was changed at the machine. CoDeSys machines need them; they are preset with the access data of the delivery state.
- **VNC-Password** – preset to match the control system. A password you have changed is kept when you change the control system.

OK saves the entries and closes the window. You add further machines in the same way.

**INFO**

You can add several machines with different labels for the same physical machine, e.g. per project or customer. This keeps reports and programs in separate folders.

7.3.2 Searching for machines on the network

Instead of entering a machine by hand, you can have your network searched for machines of iTS GmbH: in the configuration window, **Search for machines on the network** opens the window of the same name. Under **Search range** the networks of your PC are preset; you can change address and range (prefix 8 to 30). **Start search** checks every address for the services of an iTS machine (FTP, SFTP, VNC) and reads its configuration. A ping is not needed.

Search for machines on the network

Search range
 Netwoi Detected 192.168.2.0/24 127 . 0 . 0 . 0 Range / 24 Start search Check device

Access for new machines User admin Password ***** Default password

5 machines found, 2 of them new.

Status	Address	Host name	Project no.	Machine	Software	Connection	Dat
new	127.0.0.2		P26-03011	TT1010 - 2026	Version 1.0.0100	FTP	1
new	127.0.0.3		P24-01950	IPX9K Raumkombi	Ver. 7.8.5732	FTP	3
already added	127.0.0.24		IP25-0002	DWT500 - 2025	Ver. 8.7.5607	FTP	3
already added	127.0.0.31		P25-01988	SPK R600 - 2025	Ver. 6.4.4992	FTP	3
already added	127.0.0.37		P23-01892	SK1000 - 2024	Version 8.0.2573	FTP	2

Add to Companion

Name

Type

Connect via ☒ IP address ☐ Host name

Add machine

Companion folder: C:\ITS_Companion - 5 machines already added

Close

Machines found are listed with address, project number, machine name, software version, number of measurement files and connection type; the **Status** column shows **new** or **already added**. Companion recognises existing machines by their project number, otherwise by their address.

Select a new machine, check the name and the suggested type and click **Add machine**. Serial number, control system, address and equipment of the machine are taken over; after closing, the machine appears in the selection list.



INFO

CoDeSys machines need access data to be read; it is preset under **Access for new machines** with the delivery state. The search range is limited to 1024 addresses. Machines behind a router are not found and must be entered by hand.

7.3.3 Checking a device

If a machine does not appear in the list, **Check device** (also by double-clicking an entry) examines a single address in detail. On the left, the window shows a profile of the machine with an assessment and a note on what to do; on the right, all ports and their meaning for Companion. With **Add machine** you add the machine directly from there; **Copy report** provides the details for support.



SPK R600 - 2025

● **ITS machine without remote control**

Data files and programs can be fetched, but VNC (port 5900) does not answer. Remote control is not possible until VNC is active on the machine.

Address	192.168.10.31
Project no.	P25-01988
Type	SPK R600
Software	Ver. 6.4.4992
Last saved	Tuesday, October 06, 2026
Connection	FTP, without login
Data files	3

Ports

State	Port	Service	Meaning for Companion
● open	21	FTP	Data files and programs – Windows CE and PC machines 220 ITS Panel FTP bereit
● closed	22	SSH / SFTP	Data files and programs – CoDeSys machines not needed for this machine
● closed	23	Telnet	Console access – not used by Companion
● closed	80	HTTP	Web server of the panel – not used by Companion
● closed	443	HTTPS	Encrypted web server – not used by Companion
● closed	5900	VNC	Remote control of the machine screen missing – no remote control
● closed	1217	CODESYS Gateway	CODESYS programming access – for service only not needed for this machine
● closed	11740	CODESYS	Runtime system of the CoDeSys controller not needed for this machine

Further information

mDNS / Bonjour	no reply - Avahi probably not active
ConfigValues.set	read via FTP, VisuProject/DATA/user/ConfigValues.set

Copy report

Check again

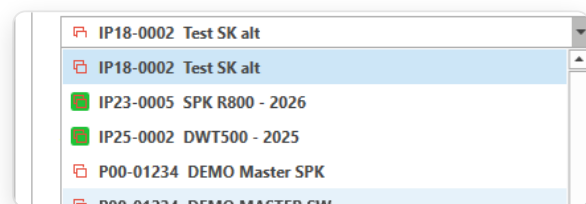
Add machine

Close

7.3.4 Reachability and changes at the machine

In the machine selection in the menu bar, machines that currently respond in the network have a green background. This is checked when the program starts and every time you open the list.

If something has changed at a machine – different serial number, different type or changed equipment –, a yellow exclamation mark appears after its name; the tooltip shows the old and the new state. Companion never takes over such changes by itself. In the configuration window, the box **Comparison with the machine** shows the differences; with ← you take over individual values, and OK saves them.



7.3.5 Changing settings

Via the **Machines** selection at the top of the configuration window you can call up the entries again at any time and change them. OK saves them.

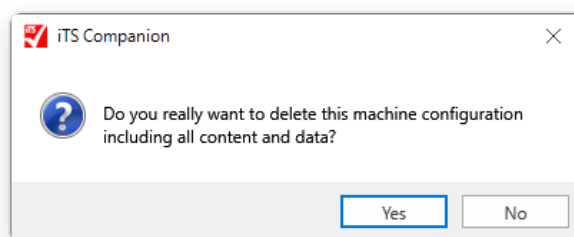
7.3.6 Removing a machine

Remove Machine deletes the selected machine after a confirmation prompt.



CAUTION

All data of this machine including reports and programs is irrevocably deleted from the PC. It cannot be restored.



CHAPTER 8

Getting measurement files from the machine

Suitable machines of iTS GmbH store a CSV file with measured values on the operating panel for every test. Depending on the machine type, this recording is an option that can usually be retrofitted.

The file contains at least all fixed parameters of the test and one line with the actual values per time step. Only what is installed as a sensor in the machine can be recorded; some values depend on the type of test, some sensors are optional.

**INFO**

Recording must be switched on before the test starts, otherwise no data is written.

The files are named `Data_` plus date and time, i.e. `Data_yyyymmdd_hhmmss.csv`. Depending on the machine and software version, the name can be entered before the start or is fixed to `DATA_` (older SK/SWK).

8.1 Via USB stick

With the Basic license you get the files by USB stick only. Plug a standard USB stick into the socket on the operating panel. The machine then transfers the files by itself; nothing else needs to be operated. Where the files end up on the stick and whether they remain on the operating panel depends on the control system of the machine.

8.1.1 Machines with the new control system (CoDeSys)

Machines of the new control generation create a folder of their own on the stick for each machine, named after its serial number (P number). It contains the measurement files in the subfolder `DATA_LOG`, next to it the files `ConfigValues.set` and `DefaultInitValues.set` with equipment and basic settings of the machine:

- `E:\P26-03001\DATA_LOG\` – measurement files of machine P26-03001
- `E:\P26-03001\ConfigValues.set`, `DefaultInitValues.set`
- `E:\P26-03002\DATA_LOG\` – measurement files of a second machine

This way one stick can carry the data of several machines side by side without mixing them: if you plug it into several machines one after the other, each gets its own folder. On the PC you then choose the machine's own `DATA_LOG` folder for each machine ([section 9.1](#)).

**INFO**

The serial number on the stick is the same as on the type plate and the one Companion shows in the machine selection in front of the label. The same stick is also used at the first program start to read the serial number for the license request ([section 4.3](#)).

8.1.2 Older machines (Windows CE and PC Platform)

Older machines store the files in the folder `\ITS_Data` on the stick. After a short time, a window reports that the stick was recognised and the data saved. After a few seconds, close the message and remove the stick.



CAUTION

SK/SWK and SPK/SRA up to software version 5.x **move** the files to the stick: they are deleted on the operating panel to free memory – including older recordings that have not been collected yet. Afterwards they only exist on the stick.

SPK/SRA from software version 6.x (from 2020) **copy** the files to the stick and leave them on the operating panel. To delete them, press the corresponding button in the message. Files already on the stick are not overwritten.

The CSV files are also available to you as raw data, e.g. for your own evaluation with Excel. Details of the transfer are described in the manual of your machine.

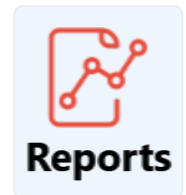
8.2 Via the network

Pro license only: via the optional network port ([section 7.2](#)), Companion transfers the files directly from the machine. This happens as soon as you double-click a file in the upper file list or use the round buttons below it. The file is moved into your machine folder and opened straight away.

CHAPTER 9

Creating reports

Choose **Reports** in the upper menu bar. If measurement files for the selected machine are already on your PC, they appear in the lower list **Local Computer**. Otherwise first fetch the files into the folder of the machine – from the USB stick or directly via the network.



9.1 Getting files onto the PC

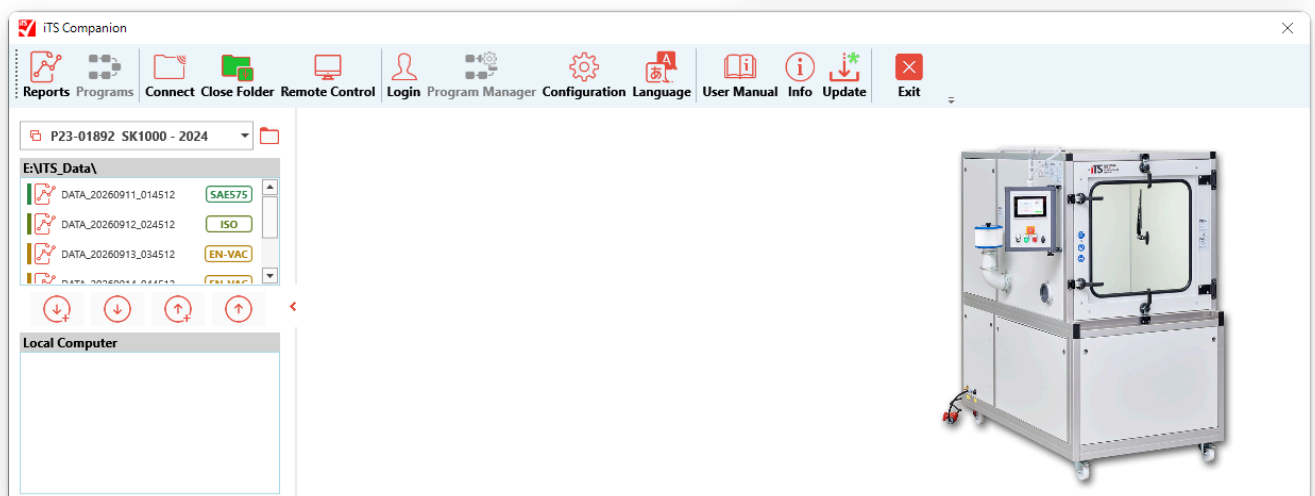
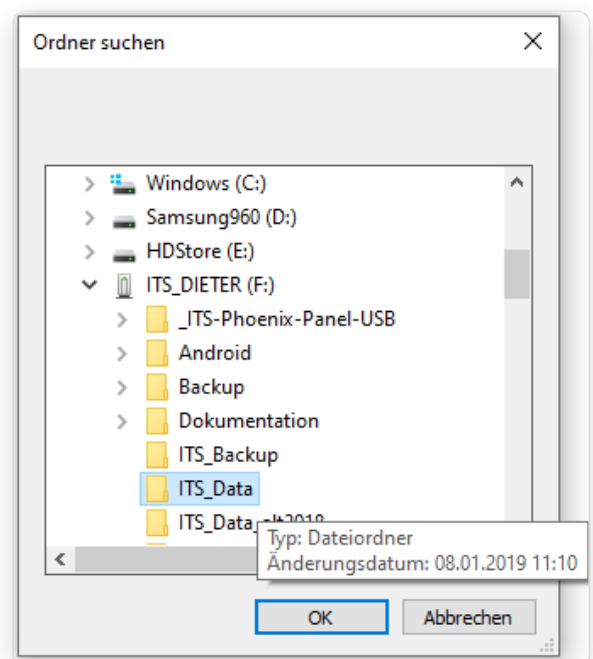
9.1.1 From the USB stick or a folder

The CSV files are already on the USB stick ([section 8.1](#)). Plug the stick into the PC, wait until Windows has recognised it, and choose **Select Folder** in the menu bar.

Navigate to the stick and choose the folder in which the machine stored its files:

- for machines with the new control system (CoDeSys), the folder `DATA_LOG` in the folder with the serial number of the machine, e.g. `E:\P26-03001\DATA_LOG` ;
- for older machines, the folder `\ITS_Data` .

After **OK**, the CSV files found appear in the upper file list.



As long as a folder is connected, the button is called **Close Folder** and is green. A click on it releases the folder, e.g. before you remove the stick. Companion remembers the folder chosen last for each machine

and suggests it again next time.

In the same way you can choose any other folder on your PC or in the network into which you copied the files beforehand.

9.1.2 Directly from the machine

Pro license only: once the connection to the machine is set up (*chapter 7*), choose **Connect** in the menu bar. The files on the machine are then directly available.

The button turns green, and Companion regularly looks for new files on the machine. If the connection drops, it turns yellow and the connection is re-established automatically (*section 10.1*).



9.1.3 Transferring files

A double-click on a file in the upper list (stick or machine) **moves** it into the folder of the machine on your PC.

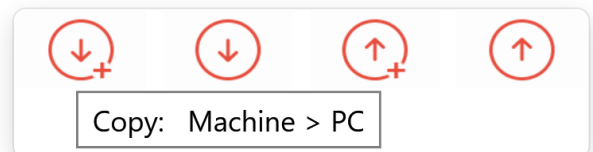


CAUTION

On a double-click, the file is deleted at the source – USB stick or operating panel – to free memory. Afterwards the file only exists on your PC.

Alternatively, transfer files with the round buttons between the lists. Besides **moving**, these also allow **copying** (+).

With the two right-hand buttons you bring files back to the machine, e.g. for another workstation. Your entries for a measurement file (header data, curve settings) go with it, because they are stored in the file of the same name with the extension `.csv.params`.



9.2 The file list

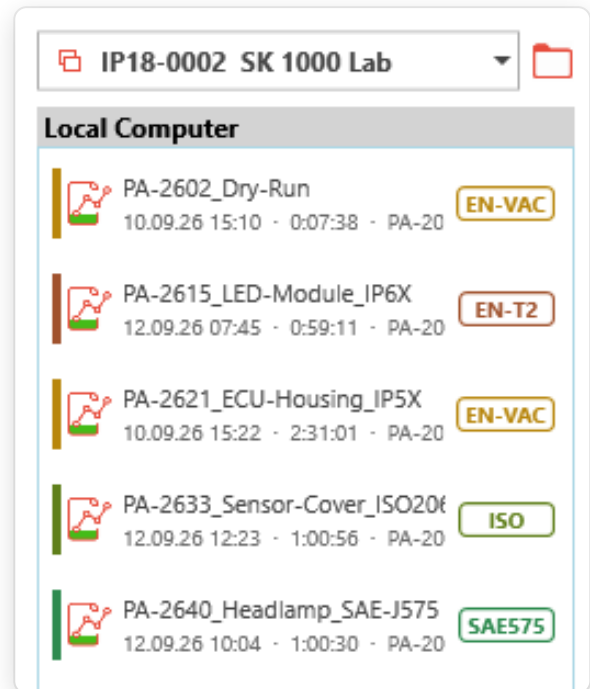
9.2.1 Type of test and quick info

Each measurement file has a coloured stripe in front of it and, on the right, the abbreviation of the type of test, e.g. IPX5/6, EN-VAC or ISO, in the colour of the type of test. A red ! ? marks a file from which no report can be generated.

If you move the mouse over a file or click it, a quick info shows type of test, machine, test start, duration, number of data points and the header data entered – without opening the file. For files on the machine, these details are only available once they are on your PC.

Without a connection to the machine, the list **Local Computer** gets the full height and shows test start, duration and the first header data entry below each file name.

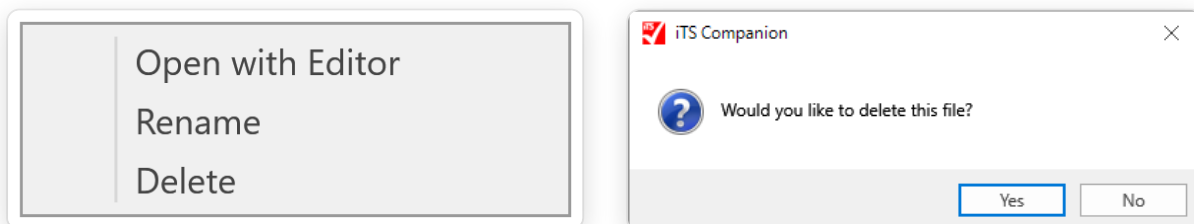
If something has already been saved for a measurement file, the list shows a green mark on the file.



9.2.2 Context menu

A right-click on a file in the list **Local Computer** opens a context menu:

- **Open with Editor** – opens the file in the editor (Notepad).
- **Rename** – gives the file a new name. Your entries for the file (.csv.params) are renamed with it.
- **Delete** – deletes the file after a confirmation prompt.

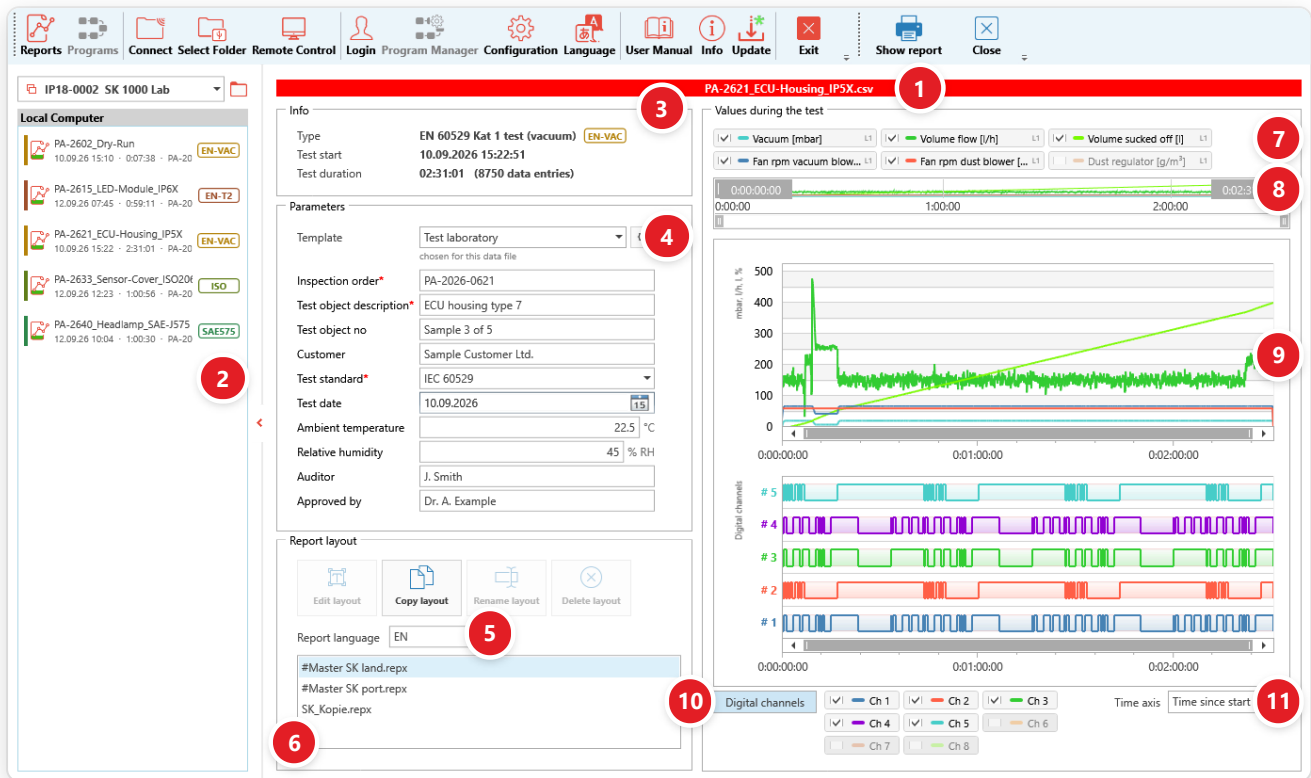


CAUTION

If you change a measurement file in the editor, it may be damaged and become unreadable for Companion. Deleted files cannot be restored.

9.3 Entering header data

A double-click on a file in the list **Local Computer** opens it. Companion shows the recorded values as curves; on the left are the details of the test, the header data and the choice of report layout.



- 1 Show report and Close (section 9.8)
- 2 File list with type of test (section 9.2)
- 3 Info: type of test, test start, duration, data points
- 4 Header data with choice of template and gear wheel
- 5 Report language of this measurement file
- 6 Report layouts of the machine type
- 7 Curve band (section 9.5)
- 8 Timeline for the time range
- 9 Chart with up to four scales
- 10 Button and fields of the digital channels (section 9.7)
- 11 Time axis: time since start or time of day

9.3.1 The fields

The **Parameters** box contains the header data of the report, e.g. inspection order, test object, customer and auditor. Every field can be written to directly; from V4.0 there is no longer an edit mode. Which fields appear and in which order is determined by the selected header template ([section 9.4](#)). Form and report always show the same fields.

Depending on the field type, the field behaves differently:

- **Text** – single-line or multi-line (up to three lines), optionally with a maximum length.
- **Number** – right-aligned, with the unit to the right of it, e.g. °C. You type with a comma or a point; in the report the number appears in the format of the report language, e.g. 22.5 °C or 22,5 °C.
- **Date** – with calendar, optionally with time. In the report in the date format of the report language.
- **Selection list** – entries to drop down, e.g. the test standard; depending on the field, your own entry is allowed as well.

The screenshot shows the 'Parameters' box in the iTS Companion software. It is divided into two sections: 'Info' and 'Parameters'.

Info section:

- Type: EN 60529 Kat 1 test (vacuum) EN-VAC
- Test start: 10.09.2026 15:22:51
- Test duration: 02:31:01 (8750 data entries)

Parameters section:

- Template: Test laboratory (dropdown menu) chosen for this data file
- Inspection order*: PA-2026-0621
- Test object description*: ECU housing type 7
- Test object no: Sample 3 of 5
- Customer: Sample Customer Ltd.
- Test standard*: IEC 60529 (dropdown menu)
- Test date: 10.09.2026 15
- Ambient temperature: 22.5 °C
- Relative humidity: 45 % RH
- Auditor: J. Smith
- Approved by: Dr. A. Example

9.3.2 Saving and undo

- An entry is saved as soon as you leave the field or press Enter. A green tick on the field confirms this for about two seconds; its tooltip gives the time.
- Escape reverts the entry in the field as long as it has not been saved. Ctrl+Z outside a text field undoes the last saved change of this data file.
- An invalid number or an invalid date is not saved: the field shows the previous value again and a red warning sign with the reason.
- If a field cannot be saved, e.g. because the file is locked or write-protected or the USB stick was removed, a red warning sign shows the reason. Companion tries again the next time you leave the field. If you change the file with an unsaved value, Companion asks whether to try again or discard the entry.

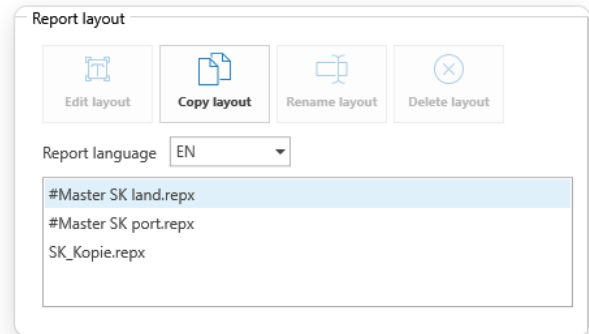
9.3.3 Required fields

Required fields carry a red star at the label and have a yellow background as long as they are empty. Below the fields, a note then states which required fields are still missing. On **Show report**, Companion asks whether the report should be shown anyway – this is a reminder, not a block.

9.3.4 Report language, time axis and storage location

You choose the language of the report in the **Report layout** box under **Report language**, independently of your user interface language: German, English, French, Italian, Spanish, Portuguese, Polish or Czech. The labels of the header data appear in the report in this language, the values entered as you wrote them.

Header data, report language, time axis and curve settings apply per measurement file. They are stored in the file of the same name `.csv.params` next to the measurement file, go with it when transferred to the machine and are set again the next time you open it.



9.4 Header templates

A header template determines **which fields** the **Parameters** box and the report show, **in which order**, which of them are **required fields** and which **defaults** they get. So you put the header data together once to suit your test laboratory or your customer, instead of entering it again for every data file.

9.4.1 Which template applies

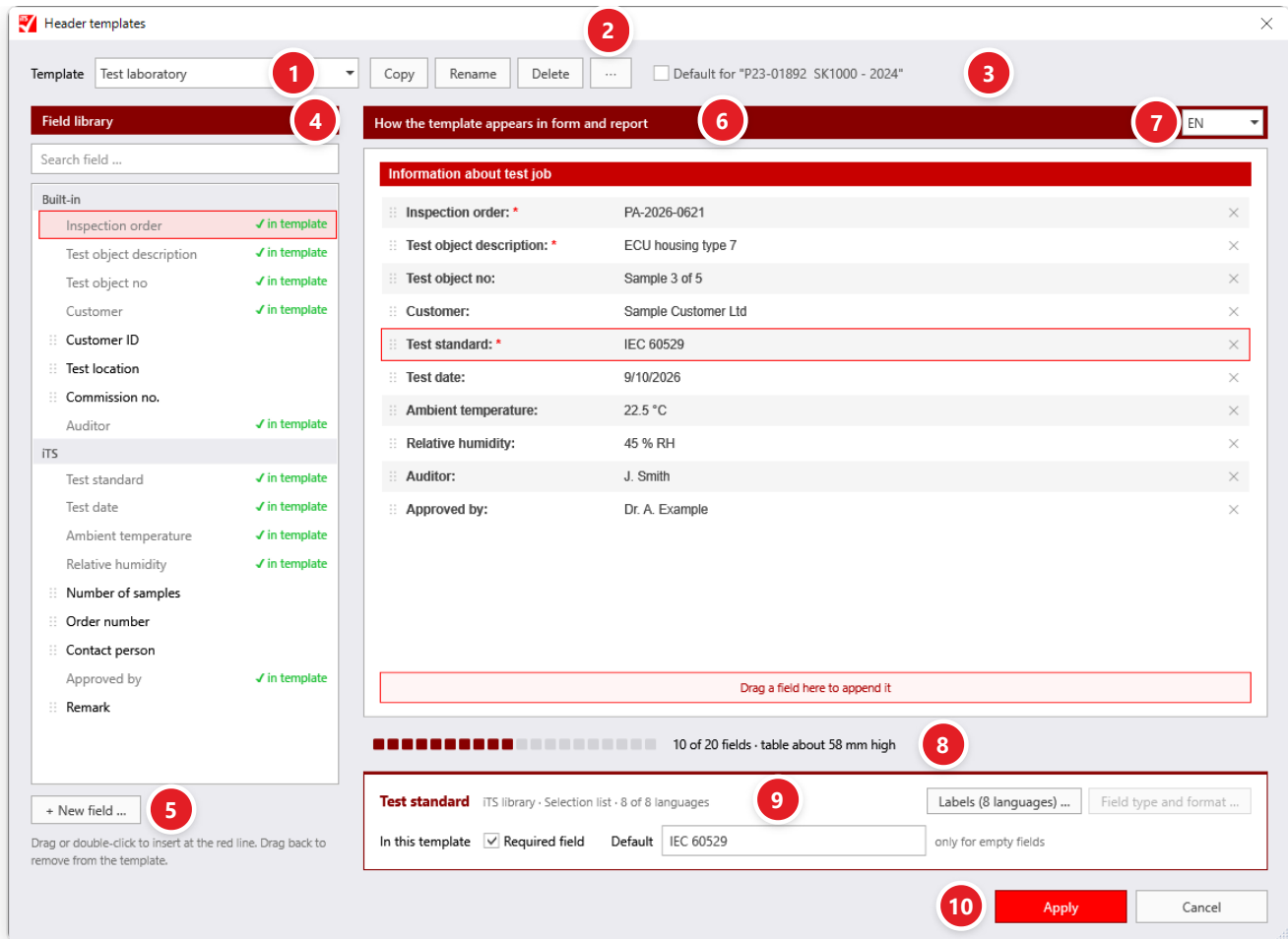
You choose the template at the top of the **Parameters** box under **Template**. Below it, a small note says where the choice comes from. The first level that applies is used:

1. **chosen for this data file** – the choice in the selection; it is saved with the measurement file.
2. **default of the machine** – the template assigned to the machine in the template window with **Default for**
3. **Standard** – the supplied template **#Standard** with the familiar eight fields from inspection order to auditor.

If a measurement file comes from another PC and names a template that does not exist here, the selection shows "template ... is missing on this PC"; the next level then applies. Values of fields that a template does not show remain in the measurement file and appear again as soon as a template contains them.

9.4.2 The Header templates window

The gear wheel next to the selection opens the **Header templates** window. On the right you see the template as it will later appear in form and report – with the values of the open data file.



- 1 Template with Copy, Rename, Delete
- 2 Export and import
- 3 Default for ... the selected machine
- 4 Field library with search
- 5 + New field ...
- 6 The template as it appears in form and report
- 7 Language of the preview
- 8 Space bar: fields used and height in the report
- 9 Properties of the selected field
- 10 Apply saves the changes

9.4.3 Creating your own template

1. The supplied template #Standard is write-protected. Select it (or another template) and click **Copy**. Give the copy a name, e.g. "Test laboratory".
2. Drag fields from the field library to the red line in the template, or insert them by double-click. Fields already in the template are pale in the library and marked "in template".
3. Rearrange the fields by dragging. Without a mouse: Alt+↑ and Alt+↓ move the selected field, Del removes it. You can also remove a field with the cross on the right of the row or by dragging it back into the library.
4. For the selected field, set at the bottom whether it is a **Required field** and which **Default** it gets.
5. If the template should apply to a machine automatically, tick **Default for**

6. **Apply** saves everything. **Cancel** discards field changes; copying, renaming and deleting a template, however, take effect immediately.

A template holds up to **20 fields**, the built-in ones included. The space bar below the template shows the places used and estimates how high the table in the report will be; multi-line text fields count three times. When all 20 places are used, the template accepts no further field until you remove one.

**INFO**

Renaming or deleting a template carries the default of all machines and the open data file along with it. Data files that had chosen a deleted template then show the default of the machine; their values are kept.

9.4.4 Required field and default

- **Required field** – appears with a red star and, as long as it is empty, with a yellow background. Before the report is shown, Companion reminds you of empty required fields.
- **Default** – is entered into an empty field the first time a measurement file is opened, e.g. the test location, the name of the auditor or “IEC 60529” as test standard. The default is then stored in the measurement file: if you change the template later, older data files remain unchanged. A field you deliberately empty stays empty.

9.4.5 The field library

The library contains three groups of fields:

- **Built-in** – the eight existing fields: inspection order, test object description, test object no, customer, customer ID, test location, commission no. and auditor.
- **iTS** – fields prepared by iTS GmbH with checked translations: test standard (selection, free entry allowed), test date, ambient temperature (°C), relative humidity (% RH), number of samples, order number, contact person, approved by and remark (multi-line). Further fields may be added with new versions.
- **Custom** – fields you create yourself.

Label, field type and format of a field are stored only in the library. An improved label therefore takes effect in all templates that use the field. The tooltip on a field shows field type, languages and the templates in which it is used. Via the context menu (right-click) you reach labels, field type and format, **Copy as own field** and **Delete field**.

9.4.6 Creating custom fields

+ **New field ...** below the library opens the dialog **New field**; for an existing custom field it is called **Field type and format**.

- **Label** – the name of the field in your user interface language. If similar fields already exist, Companion shows them; a click takes the existing field so that no duplicates arise.
- **Field type** – text, number, date or selection list.
- **Format** – depending on the field type: multi-line and maximum length; decimal places and unit; with time; the entries of the selection list (one per line) and whether other values are allowed.
- **Preview** – this is how the field appears in the report.

The new field is then in the library and straight away at the insertion point of the template.



CAUTION

The field type can no longer be changed as soon as a saved template uses the field – data files then already contain values that match the old field type. For a different field type, create a new field. A custom field can only be deleted when no template uses it any more.

Built-in and iTS fields cannot be changed. If you need one of them differently, e.g. with another label, create a copy with **Copy as own field** and change the copy.

9.4.7 Labels in eight languages

Labels (8 languages) ... opens one line per report language. The label applies to form and report; the **value** entered, however, is written in one language only.

- For number fields, the unit can be adapted per language.
- **Fits?** checks whether the label has room in form and report and warns if it would be shortened.
- An empty language shows the English label in the report; if that is missing too, the German one.
- If a custom field has the same German label as an iTS field, the dialog offers its translations as suggestions – one by one or with **Use all suggestions**.

Language	Label	Unit	Fits?
Deutsch	Umgebungstemperatur		✓ form and report
English	Ambient temperature		✓ form and report
Français	Température ambiante		✓ form and report
Italiano	Temperatura ambiente		✓ form and report
Español	Temperatura ambiente		✓ form and report
Português	Temperatura ambiente		✓ form and report
Polski	Temperatura otoczenia		✓ form and report
Čeština	Teplota okolí		✓ form and report

9.4.8 Passing templates on

With the button with the three dots you export the selected template as a file with the extension `.kopfdaten`. It contains the template and the custom fields it needs; every PC has the built-in and iTS fields itself. On another workstation you import the file at the same place. If a template with this name already exists there, Companion asks for a new one; if there is a custom field with the same identifier but a different definition, you decide which version applies.



INFO

The templates and the custom fields are stored in the folder `kopfdaten` of the installation folder. Take this folder with you when you move Companion to another PC.

9.4.9 Switching from earlier versions

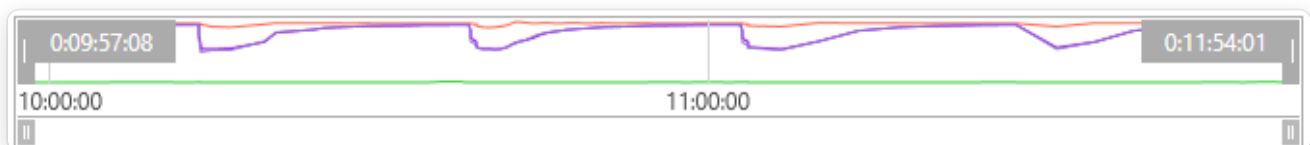
Up to V3.6, the **Parameters** box had the buttons **Save defaults** and **Load defaults**. Their task is now taken over by the defaults of a template. If you had saved defaults, Companion creates the template **Standard (imported)** once at the first start: the eight familiar fields with your values as defaults. It is not assigned to any machine – set it as the default of a machine if you want to keep using it.

9.5 Curves and time range

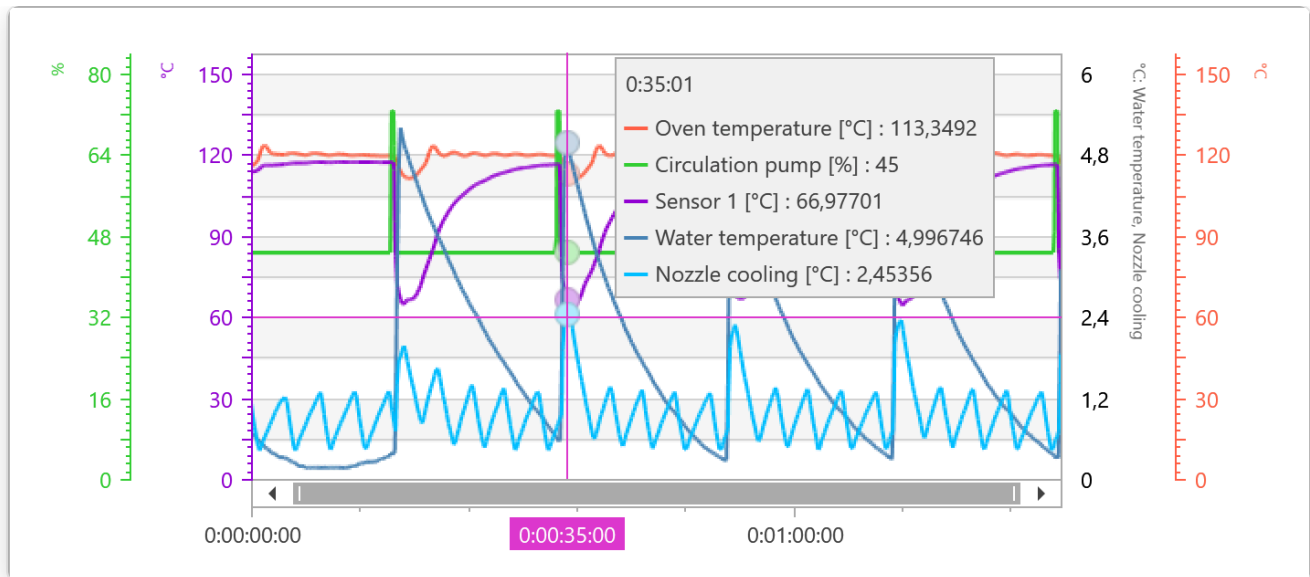
On the right of the main window you set what the charts in the report show.

☒ Oven temperature [°C] L1	☒ Circulation pump [%] L1	☒ Sensor 1 [°C] L1
☒ Sensor 2 [°C] L1	☐ Sensor 3 [°C] L1	☐ Sensor 4 [°C] L1
☒ Water temperature [°C] R1	☐ Coolant pressure in [b... R1	☐ Coolant pressure out... R1
☒ Nozzle cooling [°C] R1		

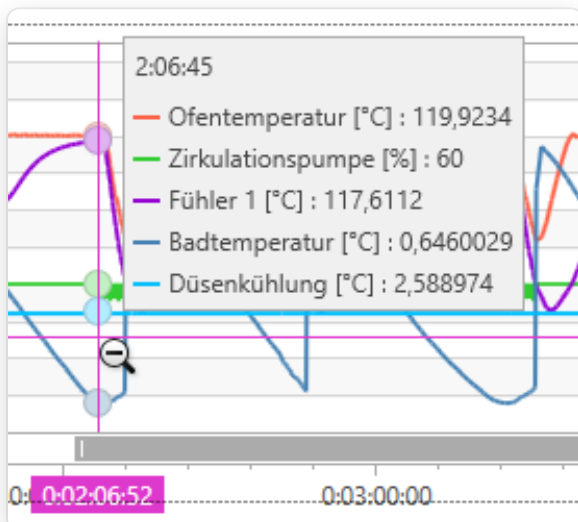
At the very top is the **curve band**: one field per curve with tick box, colour line, name and the abbreviation of its scale. The tick box shows and hides the curve; a click on the field next to it opens the settings of this curve ([section 9.6](#)).



In the narrow **timeline** above the chart you choose which time range of the test appears in the report. When opened, each file first shows the whole measurement. Move the bars for start and end; the time is shown in the format d:hh:mm:ss, and the bar shows a miniature of the measured values. With the scroll bars you move the range without changing its length. If the time range is limited, this is noted in the report.



The middle field shows the **measured values**. There are four scales, two on the left and two on the right; a scale only appears if a curve lies on it. Without your own setting it starts at 0 and ends at the next round value, and all scales have the same number of divisions so that their lines lie on top of each other. If a scale carries exactly one curve, it takes on its colour; if several lie on it, it stays black and its label names the curves.



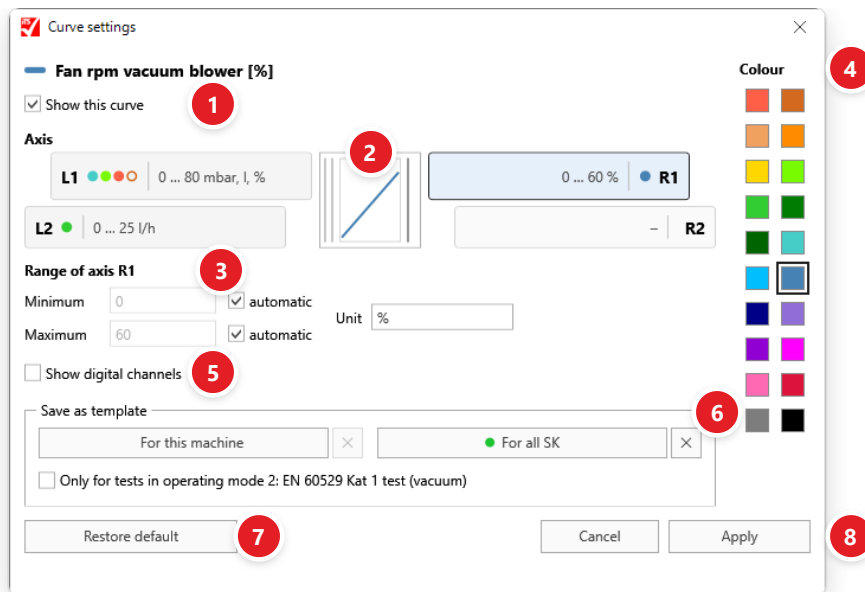
With the mouse pointer on the chart you read off the values at a point in time. With the mouse wheel you compress or stretch the time axis; this changes the time range in the timeline.

Below the chart, **Time axis** lets you choose whether the time since the start of the test or the time of day is shown.

For dust chambers (SK), tests in manual mode are evaluated as well. Time settings do not apply there, and the curve **Volume sucked off** is not preselected.

9.6 Adjusting curves

A click on a field of the curve band opens the **Curve settings** window. Here you determine whether the curve is shown, in which colour and on which of the four scales it lies. The scales are arranged as four buttons around a picture of the plot area, just as in the chart: L1 left near, L2 left far, R1 right near, R2 right far.



- | | |
|---|--|
| 1 Show this curve | 5 Show digital channels |
| 2 The four scales around the picture of the plot area | 6 Save as template, also only for one operating mode |
| 3 Range and unit of the selected scale | 7 Restore default |
| 4 Colour of the curve | 8 Apply |

- For each scale you set minimum and maximum or switch them to **automatic**, plus the unit. This applies to all curves on this scale. If the unit remains empty, Companion forms it from the names of the curves.
- Apply** saves the settings for this measurement file, **Cancel** discards them. **Restore default** resets the curve and all scales to the factory setting; saved templates remain unchanged.
- The tick box **Show digital channels** switches the digital channels on or off for this file ([section 9.7](#)).
- In the box **Save as template** you also store the settings as a template: **For this machine** applies to all data files of this machine, **For all ...** to all machines of this type. With the tick box **Only for tests in operating mode ...** the template only applies to data files of the same operating mode, e.g. only to ISO tests of a dust chamber. A green dot shows that the template already exists; the cross next to it deletes it after a confirmation prompt. Saving a template does not close the window.

9.6.1 Which setting applies

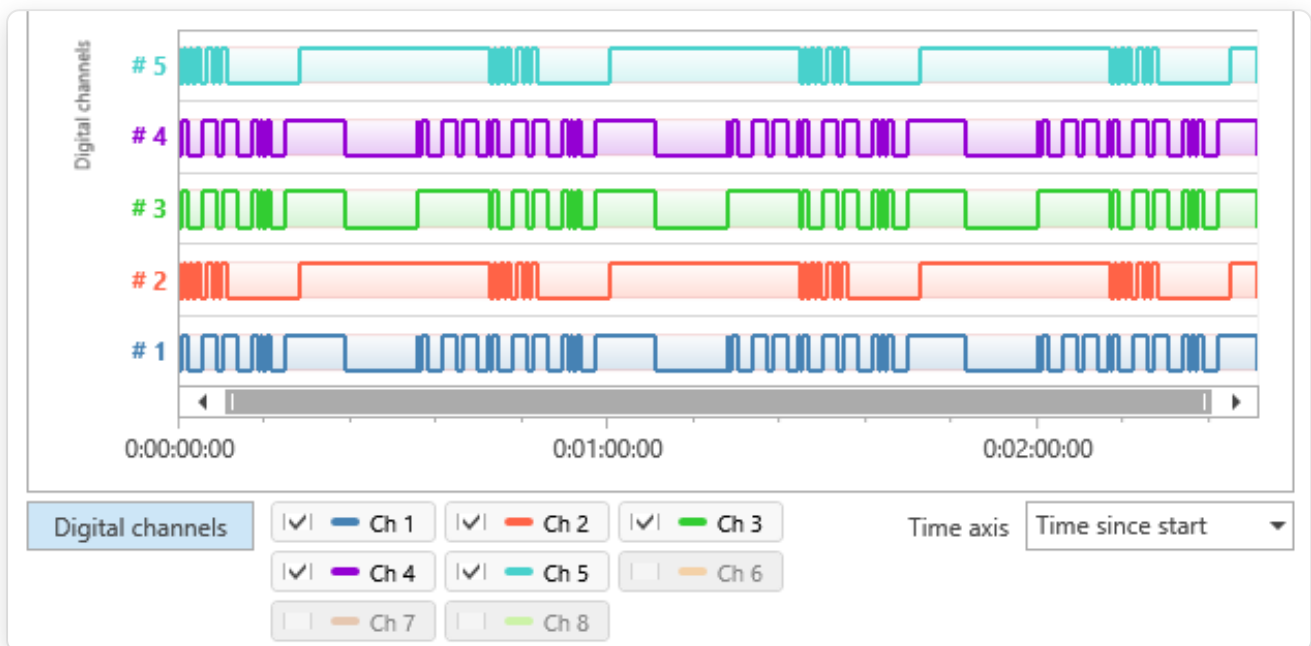
The settings of a curve – colour, scale, value range and unit – can be stored on several levels. When a measurement file is opened, Companion evaluates them from bottom to top; each level only overrides what it states itself:

- Factory setting** – supplied with the program.
- Template of the machine type** ("For all ...") – applies to all machines of this design; stored in `Kurven.xml` in the type folder under `Reports` of the installation.
- Template of the machine** ("For this machine") – stored in `Kurven.xml` in the machine folder, which you open via the small icon to the right of the machine selection.

4. **Setting of the measurement file** – stored in the file of the same name `.csv.params` and applies only to this file.

Templates saved for one operating mode only lie directly above the general template of their level. What a level does not state stays as below – a curve that was not yet contained in an older template therefore keeps its factory setting.

9.7 Digital channels



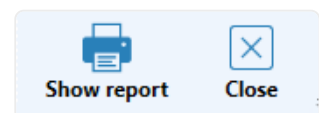
If the machine has them, Companion shows the states of the digital channels in the lower field: ON at the top, OFF at the bottom. Below the chart there is one field per channel; channels that the machine did not record or does not have are grey and cannot be selected.

To the left of them is the **Digital channels** button. Only when it is switched on do the channels appear in the chart and in the report. By default it is off; if the file supplies no digital channels, it cannot be selected. Its state is saved with each measurement file like the curves and can be part of a template.

If you switch the digital channels off or untick all channels, the lower area disappears completely, and the page of the digital channels is left out of the report.

9.8 Showing and exporting the report

Show report in the menu bar creates a report from the header data, the curve settings and the selected report layout and opens it as a preview in a window of its own. A double-click on a layout in the list also opens the report. If required fields of the header data are still empty, Companion asks first.



- For every machine type there are two standard layouts, A4 portrait (port) and A4 landscape (land), e.g. **#Master SK port** and **#Master SK land**. Layouts with a hash (#) at the beginning are write-protected templates of iTS GmbH and remain unchanged during updates.

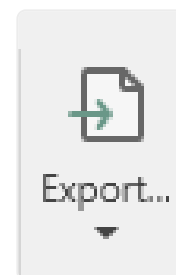
- Companion renames older layouts of iTS GmbH from earlier versions to `$$$_oldVersion` at the start. They stay in the list and can be deleted or used further.
- The standard layout consists of a cover page, a page with test parameters and the pages with the measured values and – if present and switched on – the digital channels.
- Colours, scales and value ranges match the preview. The legend is shown in two groups above the chart: on the left the curves of the left scales, on the right those of the right ones.
- The report appears in the report language of the measurement file. Your own layouts copied with an earlier version only know German and English and appear in English in the other languages.

**INFO**

With the Pro Plus license you copy a standard layout with **Copy layout** and adapt the copy in the built-in report designer: your own cover page, choice of parameters, charts, headers and footers. The templates of iTS GmbH are always kept. If you are interested: support@its-gmbh.de

In the preview, **Export...** exports the report in many formats, e.g. PDF or DOCX (Word). Saved reports can also be opened again there.

Close in the menu bar ends the display of the measurement file. But you can also simply double-click another measurement file at any time.



CHAPTER 10

Remote control of a machine



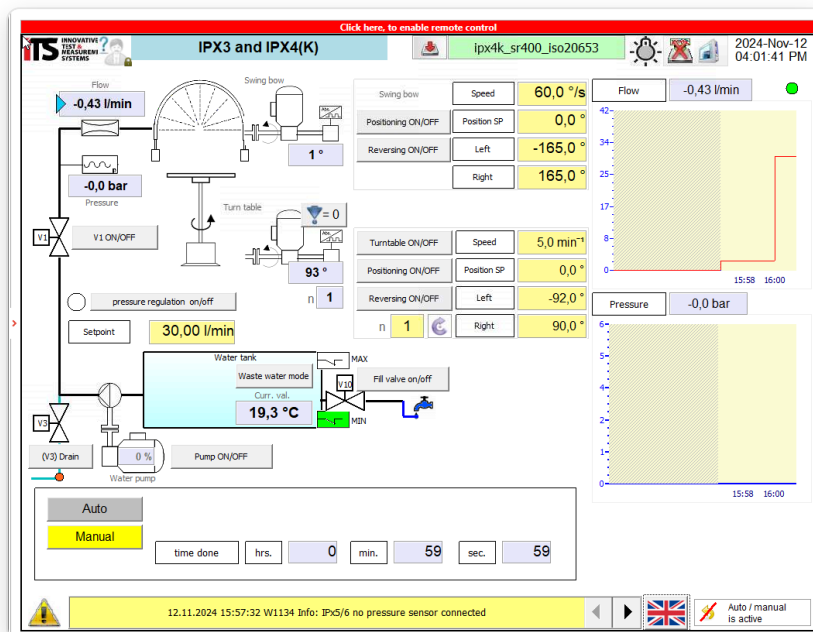
INFO

Pro and Pro Plus license only.

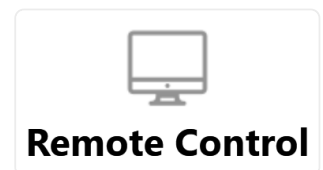
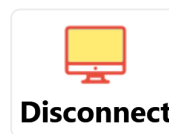
With a network connection and the machine set up ([chapter 7](#)), you operate the display of the machine from your PC. The operating panel of the machine must be switched on, as must the **Power on** switch or the control voltage.



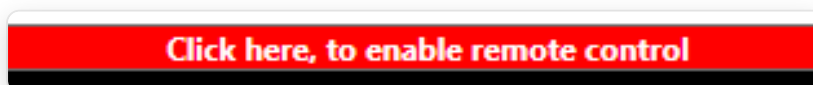
After a click on **Remote Control** in the menu bar, the current screen of the machine operation appears.



The colour of the button shows the state: **green** connected, **yellow** interrupted and reconnecting, **grey** disconnected. A click on the green button (**Disconnect**) ends remote control.



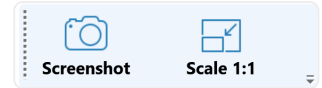
At first, a red bar is shown at the top edge of the screen: you can only watch. A click on the bar hides it and enables operation. You can now do everything as on the display of the machine.



**CAUTION**

A running test can be aborted or disturbed by actions on this screen. You work on the same display that an operator at the machine sees.

During remote control, **Scale 1:1** adapts the display to the size of the operating panel. **Screenshot** saves a picture of the display in the folder of the machine, next to the reports.



10.1 Connection loss and reconnecting

A running remote control session and a network file connection are monitored continuously. If the machine no longer responds, e.g. because it was switched off or the network is interrupted, the button turns yellow.

- As soon as the machine responds again, Companion re-establishes the connection up to three times. As long as it cannot be reached, Companion waits for up to 60 seconds.
- If reconnecting succeeds, the button turns green again. If it fails, the session is ended and the button turns grey.
- A click on the yellow button ends the session immediately without waiting for the machine.

CHAPTER 11

Programs (recipes)

**INFO**

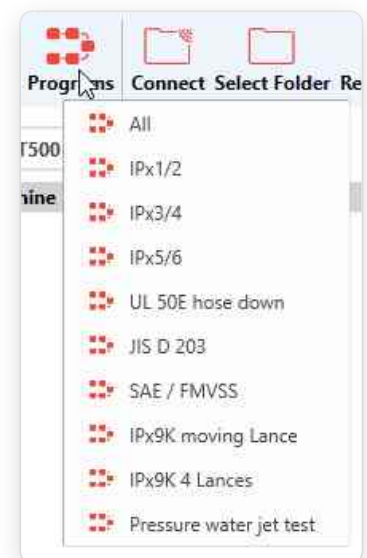
Pro license only and for the machine types SPK, SRA and DWT.

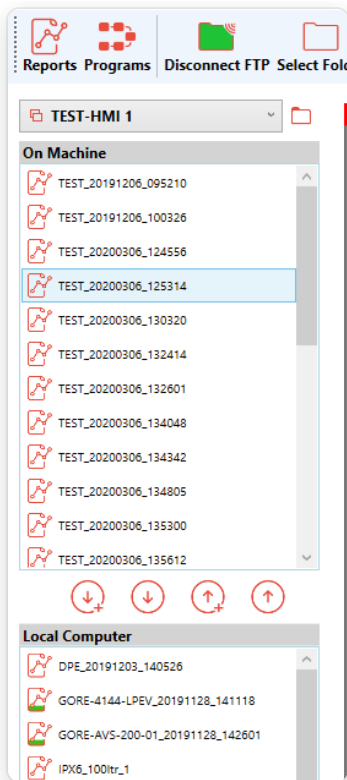
You edit test programs (recipes) for new tests on the PC, copy them and transfer them back to the operating panel of the machine.

11.1 Getting programs from the machine

After a click on **Programs** in the menu bar, a list of the machine functions for which programs can be created appears. If you choose a function, the lower list **Local Computer** shows the programs of this function on your PC; with **All** you see all of them.

Depending on the equipment, functions that your machine does not offer may also be listed here. Such programs can partly be edited, but the machine does not show or run them.





When called up for the first time, the list **Local Computer** is usually empty. Then first fetch a program from the machine: with **Connect**, the upper list shows the programs of the selected function on the machine.

Unlike with reports, a double-click **copies** the program to your PC instead of moving it. It then opens straight away for editing. A double-click on a program in the local list opens it.

You can also transfer programs with the round buttons between the lists – by **moving** as well as by **copying**.



CAUTION

When moving, the program is deleted at the source. If you moved it from the machine, it can no longer be called up there.

11.2 Editing programs

After opening, the program editor is available, shown here using a test with an IPX3/4 oscillating tube as an example. The adjustable parameters correspond to those you also set on the operating panel of the machine.

The header shows the selected type of test and below it the file name of the program, as the operating panel also shows it.

In the grey selection field you choose the language; to the right of it is the comment on this test in this language. You can enter a separate text for each language; individual languages may remain empty.

For a line break, write `\n` (without spaces) at the desired position; the operating panel then shows the text on several lines.

Details of the parameters and their values are given in the operating manual of your machine.

11.3 Saving and transferring to the machine

Save in the menu bar saves the changes immediately in the open file. **Save as** asks for a new name and creates a copy in the local folder; it appears in the list straight away.



Close ends editing without a confirmation prompt – as does opening another file and closing the program. Unsaved changes are lost.

**INFO**

If the original program is write-protected, you can still create a copy with **Save as**. The copy is initially without write protection; you can edit it and save it again with the protection you want.

With the round buttons you transfer the program back to the machine – as a copy (the original stays on the PC) or by moving (the program is then only on the machine).

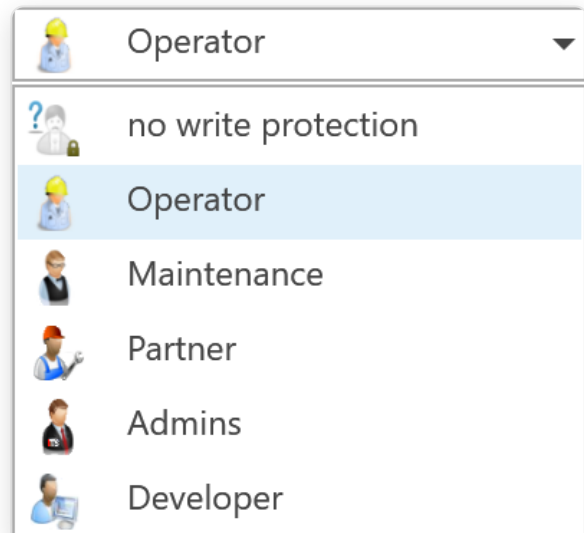
**CAUTION**

Only the saved file is transferred. If you did not save beforehand, the last saved version is active on the machine.

11.4 Write protection and access rights

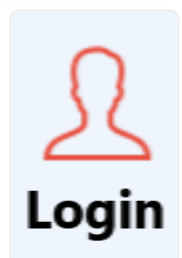
To the right of the comment is the access protection of the program. Every program can carry write protection; it can then only be changed after logging in with a sufficient level. The operating panel shows protected programs with a * at the end of the name and prevents changes there in the same way.

The programs supplied by iTS GmbH usually only carry the lowest level 1 = Operator. It protects against accidental overwriting.



A click on **Login** asks for user name and password; your current level is then shown in square brackets in the title bar.

Anyone with at least the protection level shown can edit and overwrite the program. The protection level itself can be changed to your own or a lower level, also to **no write protection** – then every user may make changes.

**INFO**

The user name for the Operator level is **USER**, the password is also **USER**. Ask your supplier or iTS GmbH for the access data for higher levels.

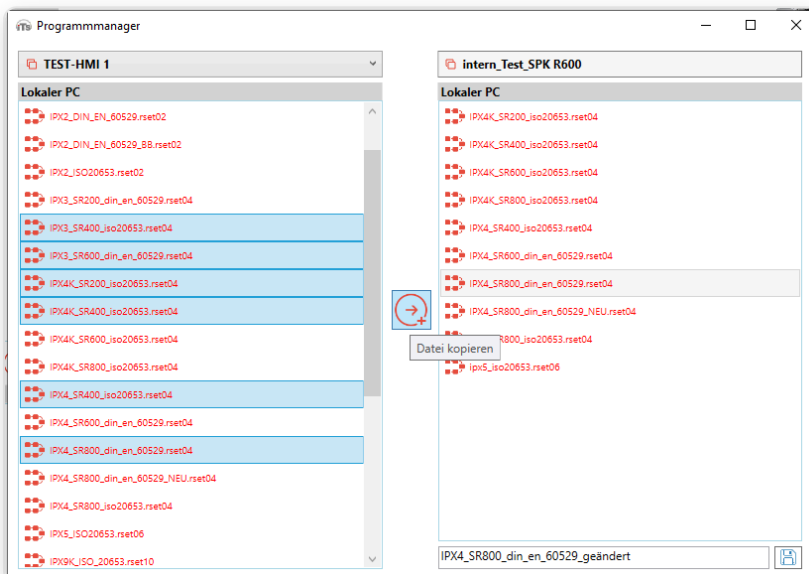
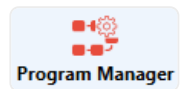
CHAPTER 12

Program Manager

**INFO**

Pro license only.

The Program Manager manages programs (recipes) across machines. With it you copy programs of another machine – or of another project – into the machine selected in the main window.



1. Choose the source machine at the top left. The left list shows all programs from its folder.
2. Select the programs you want – several with the Shift or Ctrl key – and click **Copy file** in the middle.
3. If the name already exists, Companion appends date and time.
4. You rename a program of the right list in the field at the bottom right.

**INFO**

The content of the programs is not changed. Programs may also appear that your machine cannot use because it lacks the necessary equipment. To separate by project or customer, simply add several machines with the same settings ([section 7.3](#)).

CHAPTER 13

Manual, info and help

User Manual in the menu bar opens this manual in the language of the user interface; for languages other than German, the English version appears.

Info opens a window with copyright details and the version number of your software. The splash screen shows the same details at program start, together with licensee and expiry date.

Via the links in the info window you reach the website of iTS GmbH, the support address support@its-gmbh.de and the third-party licenses.



13.1 Privacy

Via the link **Privacy** in the info window you can read which data Companion transfers: for the update check only the query of the current version number, the license request only if you send it yourself. You reach the same notice below the license request form.

13.2 Unexpected error

If an unexpected error occurs, Companion shows a message instead of crashing. **Copy error report** puts the technical details into the clipboard; paste them into an e-mail to support@its-gmbh.de. **Show log file** opens the folder with the log file `ITS Companion Fehler.log`. In most cases Companion keeps running afterwards; it is only closed if that is not possible.