SOFTWARE

S!MPATI *

E-Mail • WebServer • LabVIEW • SQL-Server • TCP/IP-Server

Communication on a higher plane

Simulation Package for Test System Integration

schunk Group

Weiss Umwelttechnik GmbH
Simulationsanlagen • Messtechnik

WEISS TECHNIK

Controlled environmental conditions with S!MPATI*

We set standards

The system control software S!MPATI* enables optimum operation of your environmental simulation and oven systems for performing tests in the fields of research, development and production.

The operation of test systems becomes easy and time-saving. The integrated monitoring routines enhance the reliability of the systems.

You decide to what extent and how frequently monitoring routines are carried out. The evaluation and documenting of testing procedures and the integration of your special measuring data guarantee a high standard of quality.

S!MPATI* networks testing systems with a PC or a PC workstation. The archiving of all parameters of chamber configurations is thus ensured.

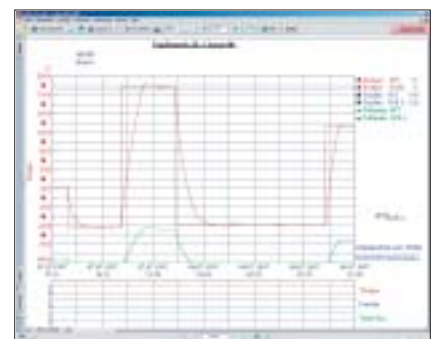Thanks to user-friendly operation and self-explanatory menu guiding no menu training is necessary.

Online-help responds to any questions that you may have.

S!MPATI* integrates itself into your PC-network and enables the operation with your Internet Browser from other PC's without needing special software.

What has S!MPATI* to offer?

- Control the test cycle
- Store measured data
- Easily create test programs with the graphics editor
- Network up to 99 units
- Connect additional measuring devices
- Record irregularities and possible malfunctions during the test cycle
- Print out measured data in the form of a graph
- Copy measured data for evaluation in other programs
- Calculate gradients of process parameters and times for altering the process parameters
- Manage your programs for production processes and tests in a coherent and clear manner
- Simulation data are provided by the S!MPATI*-webserver in the PC network
- The message service supports the transfer of messages by e-mail to an existing mailserver (SMTP)
- Remote control of the units in the network via JAVA-Applet with your Internet Browser
- Administration of different users
- Graphic symbols or photos can be chosen as chamber symbols
- Analysis with illustrative graphics and calculating options
- The possibility exists to block the chamber for external access

Options

- Optional monitoring of units in Internet Explorer 6.0 by ASP.NET-application on internet information server (IIS 6.0) under Windows Server 2003
- Optional module allows signing of electronic, paper-free test documents by means of electronic signature
- Read in of programmes and production data (product, operator, system) through bar code
- Easy control panel EBO
- Acoustic error signal with part 11-activation (S!MPATI*-Pharma)
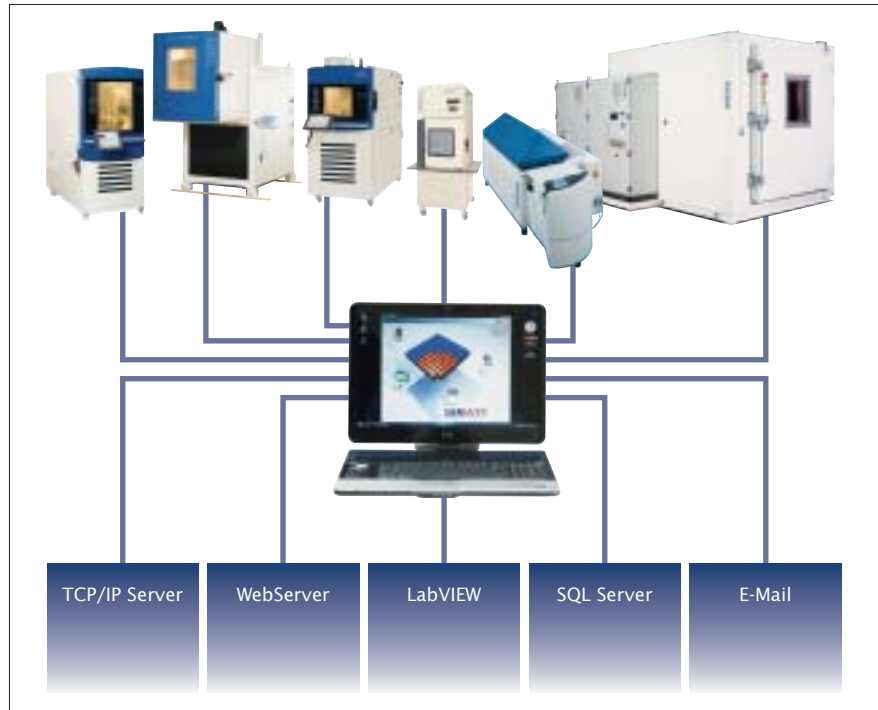
…by communication without limitation

Interfaces

For linking with your systems S!MPATI* processes data from the following external interfaces:

- RS 232 / RS 422 / RS 485
- Ethernet
- IEEE 488.2/GPIB (option)

Thanks to internal interfaces S!MPATI* is compatible with

- Microsoft-Word
- Microsoft-Excel
- National Instruments LabVIEW
- Via TCP/IP interface it is also compatible with your special user software
- Acrobat reader documents

S!MPATI* can operate under Windows 2003/2008 Server or Windows XP Professional/ Windows Vista.
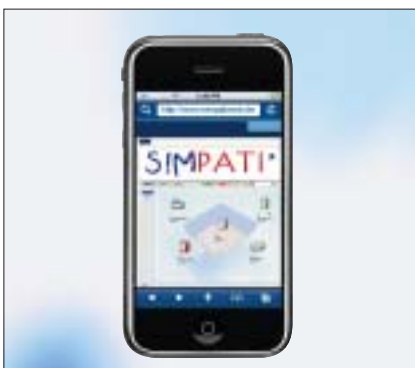

| TCP/IP Server | WebServer | LabVIEW | SQL Server | E-Mail |

Mobile communication

S!MPATI* provides process information also via your hand held PDA (Personal Digital Assistance).

The PDA represents the S!MPATI* services via Browser or receives e-mails generated in S!MPATI*.
The PDA can be used either in your facility-network via wireless LAN or universally via GPM, GPRS or UMTS.

The PDA permanently provides you with the latest information.

S!MPATI* has a webserver at its disposal which processes the relevant information and places it into the PC network. It can be retrieved by any PC through means of a suitable Internet Browser.

Create test programs...

Special editors for different test cycles:

Graphic editor

Facilitates the creation of test programs.

In contrast to the previous task of programming, you can use the graphic editor to design your test cycles with the greatest of ease.

As soon as you have selected the menu item "Create test program" the graphic editor appears on the screen together with a small cross that you can move with your mouse.

● Move the mouse pointer to a point on the profile that you wish to alter.

● Double click at this point with the left mouse button.
  > You have determined the first point of your test program.

● Move the created profile point to the required position by clicking the left mouse button and keeping it pressed whilst moving.

● Move the cross in any direction (e.g. to the time t = 20 min).
  > You have now designed the first 20 minutes of your test program (programmed).

Your Advantages:

● Time-saving as no extensive training required.

● Error-free and quick creation of test cycles.

Symbolic editor

You also have the possibility of using the "Symbolic Program Editor" for all systems with a S!MPAC*-, S!MCON/32*-NET- and M!NCON/32* control system.

For the creation of simulation programs, graphic POUs (program organization unit) such as fixed value, jump and ramp are rowed together and the course of curve is clearly displayed in a second window. This editor is particularly suitable if special set value curves, e.g. exponential functions (that can be very difficult to convert) are to be realized.

You have the choice – graphic or symbolic programming of time controlled processes.
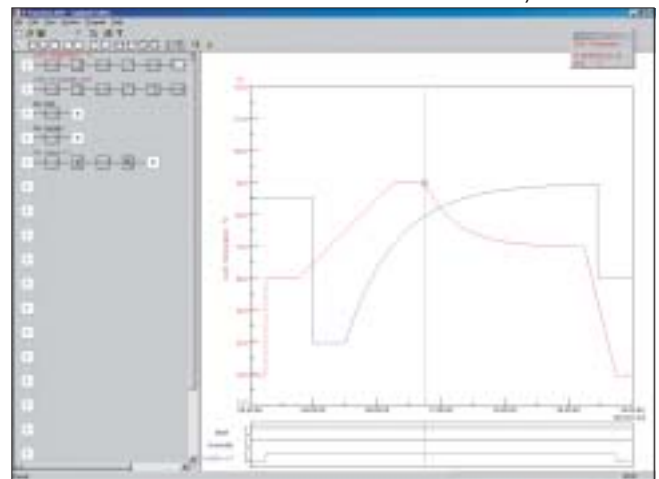
Shock test editor

There is a special editor for the cyclic temperature shock tests which interrogates the essential testing parameters, such as the temperatures in the hot and cold chambers and the dwell time, in a simple input mask and converts them into the corresponding test programs.
The following operating modes are supported:

● Normal (time control only)

● Time optimised (minimum total running time with guaranteed dwell times)
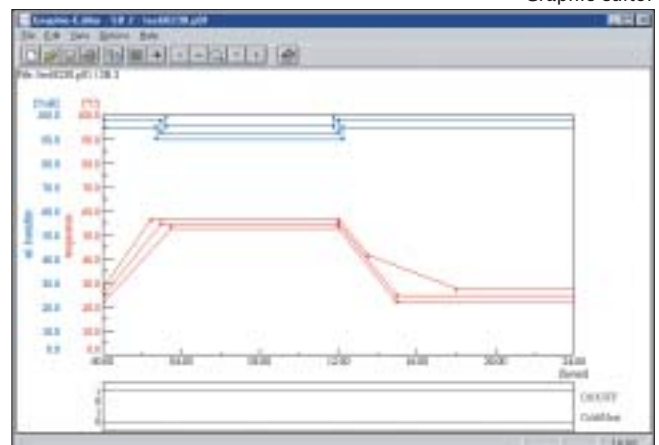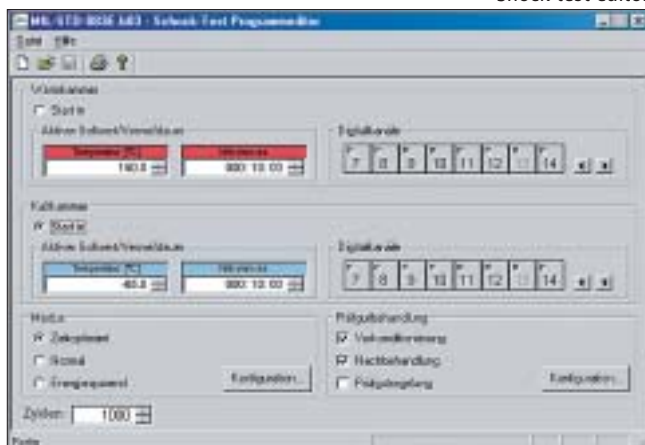
● Energy conservation

Pre- and post conditioning samples can also be programmed.

Symbolic editor

Shock test editor

Graphic editor

...and evaluate measured data

BarCode scanning technology for data acquisition...

BarCode scanning technology can be used for data acquisition.

Wireless scanner technology scans and transfers the information during the loading of the chamber.

As alternative to keyboard and mouse this solution provides significant advantages such as:

- Simple to use – even in clean-room conditions
- "Fault-free" input of lot numbers and product ID's
- Scanning of process data
- Automatic assignment of process cycles to existing products
- Extensive training not required, no PC operation

Special features and advantages of the measurement-evaluation...

The measured data are stored and can be represented at all times. You receive all the information necessary for benefiting from the evaluated measured data.

- Set and actual values of all process parameters
- Settings of all digital channels during the entire test period
- Deviations from actual values compared to set values
- Gradients of the process parameters
- and much more ...

Processing of the measured data e.g. with MS-Excel. You can represent the measured data over the entire test period or over a selected section of it.

It is also possible to display sections using the zoom function and display exact values of the process parameters using the readout function.
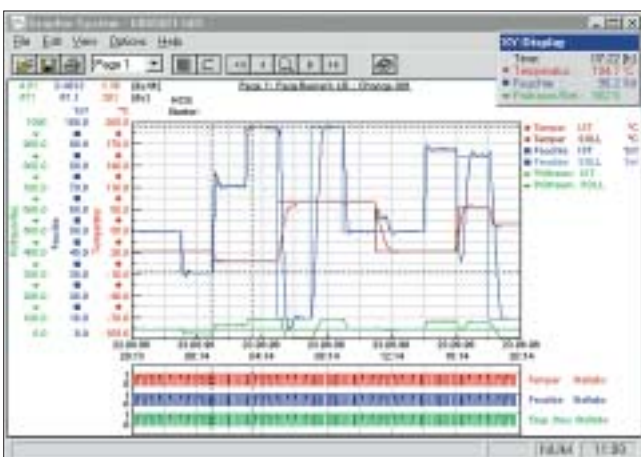
For further evaluation you can also load the measured data in Excel.

For documentation purposes you can copy the measured data in graph form to your Word documents or file it as PDF documents.

The advantages:

- Perfect verification of extensive tests carried out on your products
- Easy evaluation due to clear graphic representation and calculation options
- Clearly arranged representation of all digital channels
- Processing with well-known software products such as Excel, Word and Acrobat Reader
- Compatible with your special user software due to TCP/IP interface
- Easiest integration into automation ambience
- Industry standard interface for process visualisation systems
- and many more ingenious features that we would be pleased to demonstrate.
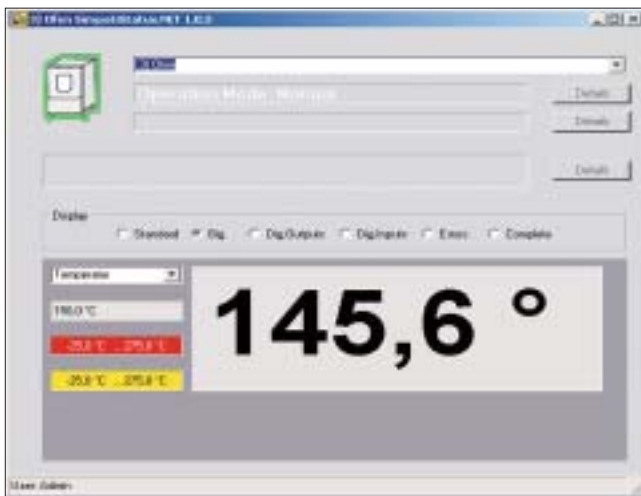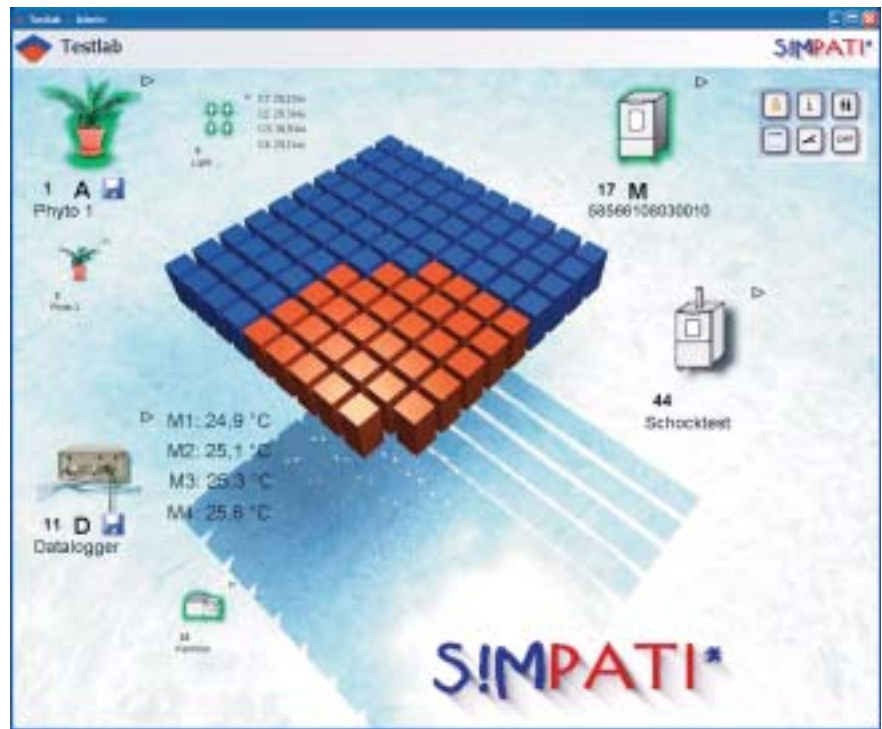
Weiss Umwelttechnik ...
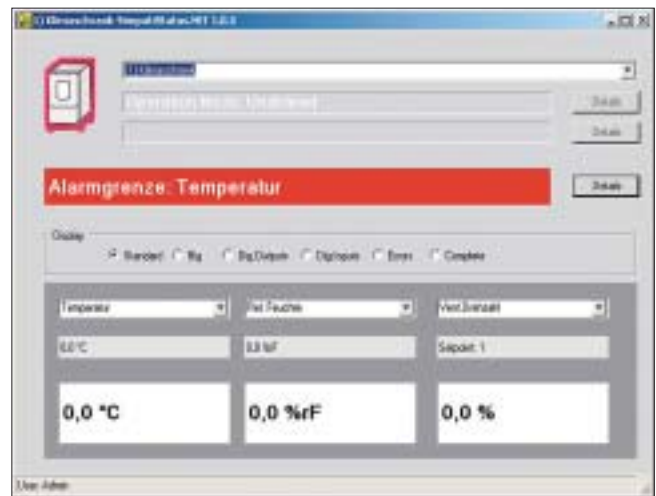...we set standards!

Evaluation

Functionality...

S!MPATI* manages all system and error messages on the hard disk of the PC. The error report is a clearly laid out function for browsing through the error databases with regard to individual units, default time periods or different error categories.

In addition to the normal messages on the screen and the entry in the report file, e-mails can be generated which are sent to different addresses. Recipient of such an e-mail may be the PC in the office, an operation and control centre or a mobile telephone.
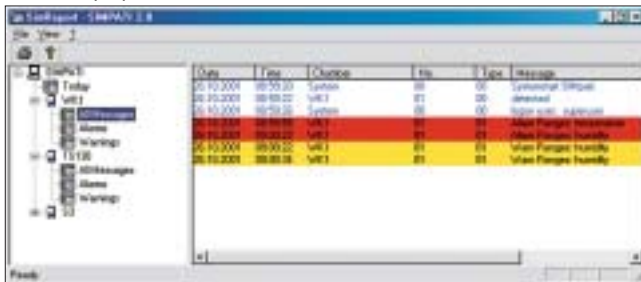
S!MPATI* uses an existing mailserver and supports SMTP.

Status display

Status display

Error report

SIMPATI*		Windows 2003/2008 Server	Windows XP Professional/Windows Vista
For computer system		IBM compatible PC	
CPU[1]		Pentium 4 or compatible	
Main storage		≥4 GB	≥1 GB
Hard disk capacity free for SIMPATI*		≥40 MB	≥40 MB
Graphics		≥800 x 600 Pixel, 256 colours with appr. screen	
CD-ROM drive		yes	yes
Keyboard		Standard	Standard
Mouse		Standard	Standard
.Net Framework ≥2.0		Standard	Standard
Supported interfaces		RS 232 / RS 422 / RS 485, IEEE 488.2 / GPIB / TCP/IP with external converter	
Networks	– Windows	yes	yes
	– Novell Netware	yes	yes
	– TCP/IP	yes	yes
Operating modes	Manual operation	simple setting of fixed software set values, permanent monitoring of system	
	Automatic operation	automatic setting of simulation and production programs, permanent monitoring of system	
Channels to control (e.g. temperature, humidity)		64	
Channels to set (e.g. fan)		64	
Channels to measure (e.g. free Pt 100, 0 – 10 V)		64	
Channels to switch (e.g. start)		128	
Channels to count (e.g. operating hour counter)		16	
Event-oriented intervention in the cycle via the linking program		yes	
Programming:	a) Graphic editor	easy setting of set values,	
	b) Symbolic editor	tolerance limits and control tracks	
	c) Shock test editor		
Documentation of the program (printer)		Line graphics/Comment	
Signing of documentation with electronic signature		Option	
Program start	– Selectable starting point	yes	
	– Lead time	yes	
Automatic start after power failure and return of voltage		able	
Representation during simulation cycle		in table form/Line graph	
Automatic alarm signalling of faults		yes	
Archiving		Data records are stored in the local hard disk or in the network	
Archiving frequency		able 5 sec. until several hours	
Evaluation of results		Line graph/in table form	
Error report		Screen output/Printer output	
Error signalling		local/via network/as e-mail (SMTP)	
Support of add. measured values		via software interface to different data logs and converter cards	
Printer		all system printers	

[1] The exact specification of the hardware and software requirements is included in your specific quotation.

Qualification documentation

For the SIMPATI* software we provide FDA-conform qualification documentation.

Manufacturer's Declaration FDA 21 CFR Part 11

All devices with SIMPAC*-, SIMCON/32*-NET- and MINCON/32* controls fulfil the regulations of **FDA 21 CFR Part 11** on operation with SIMPATI* Software from version 2.02.
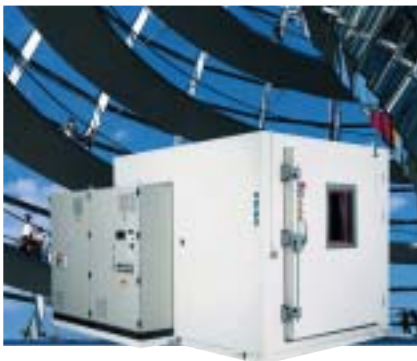
Test systems for professionals. Test the best…

Software
S!MPATI* **Pharma**

Electronic recording of measured values by software S!MPATI* Pharma version 2.06 and higher meet the guideline **FDA 21 CFR Part 11** as to the extent described in the manufacturer's declaration FDA 21 CFR Part 11.

A qualification documentation according to GAMP 4 is available for software packages S!MPATI* Pharma as of version 2.02.

A complete product range for temperature and climate testing is available, with test space volumes of approx. 34 litres to 2160 litres and working ranges of − 75 … +180 °C and 10 … 98 % r. h.
In addition, we also offer an extensive selection of proven test systems for simulating exposure to weather, temperature shock, corrosion and long-term testing for research, development, quality assurance and production.

As one of the leading manufacturers of simulation systems worldwide, Weiss Umwelttechnik offers the entire range of high-quality test equipment: from economical series devices to walk-in systems process-integrated systems built to customer specification.

A high-performance after-sales service ensures the optimal support for our customers and high operational safety of the systems. Decades of experience in the various fields of application and an intensive exchange of information with our customers throughout the world all serve to guarantee good co-operation.

If you value know-how, service and all-round safety, ask Weiss Umwelttechnik.

Further information, technical field offices in Germany, subsidiaries and agencies worldwide can be found at

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