test.commander

System Configuration Software

Most important features:

- **Simple and fast configuration**
  of measuring and I/O modules up to configuration of complex systems

- **Online Mode**
  unknown measuring configurations can be read into the test.commander for further processing

- **Offline Mode**
  creation and modification of projects without measuring system connected, including performance check

- **Visualization of measured data**
  test.viewer with Y/t and X/Y display, spectral analysis, zoom and differential measuring functions

- **Comprehensive support functions**
  integrated software for updating all modules and Test Controllers

- **Wizard – from switch-on to first measured result**
  automatic support for network connection, creating projects and addressing modules

- **Access rights for various hierarchy levels**
  protection against access to various functions and settings

- **Creation of own module templates**
  prepared module configurations for standard applications

- **One program for all systems**
  test.commander configures all e.series and Q.series measuring systems; free updates without time limit

- **Language can be switched easily to German, English or French**
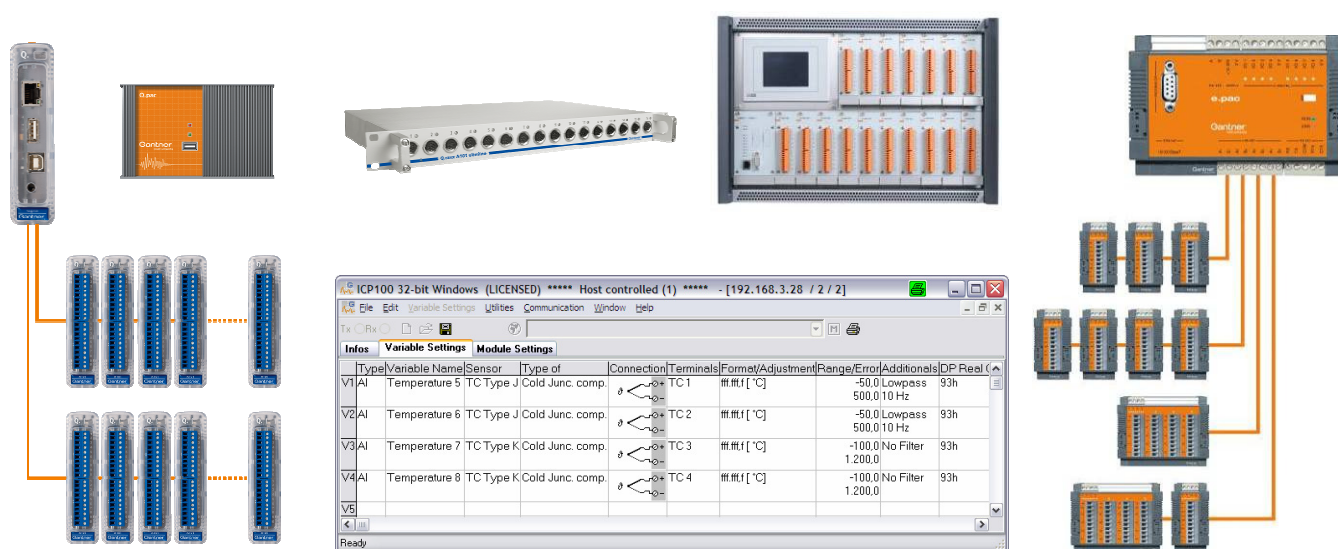
test.commander is a program for Windows® 2000, NT, XP, and Vista, which allows complex systems, consisting of one or more Test Controllers and multiple Q.bloxx or e.bloxx modules, to be configured and adapted to the specific requirements.

The standard Ethernet interface is used for configuration. The test.commander serves as the FTP client for reading and writing the configuration files and therefore has access to all measuring system parameters. The ICP100 configuration software is included with the test.commander. The integrated test.viewer allows the measured data to be visualized and analyzed even during configuration.

Start

When the test.commander is started 4 options are available:

- open setup wizard
- open new project
- open new project and read in online systems
- open existing project

Open setup wizard

The wizard provides user guidance starting with connection of the measuring system, through configuration of the Ethernet interface and module addressing, right on to the first measuring operation.

Create new project

A measuring system can be created offline by selecting test controllers and I/O modules. A number of module configurations are already present for supplementation or modification. Connection to a measuring system is not necessary for this option.

Open new project and read in online system

Here it is possible to read in a connected system configuration online. This possibility is very helpful when configuring a measuring system that already exists.

Open existing project

This feature opens a project saved on the PC, which can then be modified online or off.

Display of connected equipment

All controllers as well as measuring and I/O modules are arranged clearly in a tree structure with their variables. This ensures extremely high speed access to individual functions.

Operation of the test.commander is based primarily on context menus (right mouse key). This ensures simple selection and configuration of all modules shown in the tree structure.

Configuration of individual modules

The ICP100 software for configuration of the individual measuring and I/O modules is completely integrated into the test.commander allowing access to each individual module.

Creating special templates

The test.commander allows creation of special, user-related templates for module and controller configurations. These can be saved for quick and easy use later.
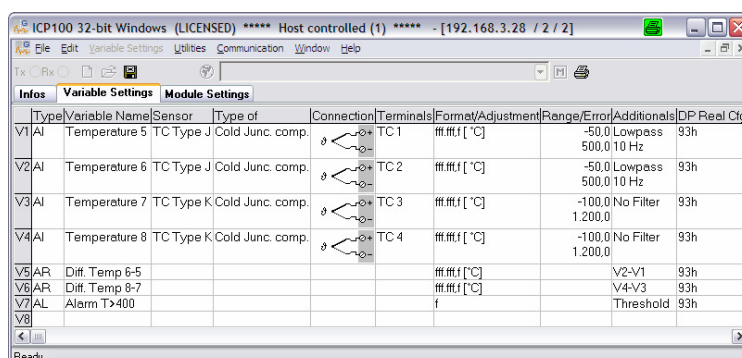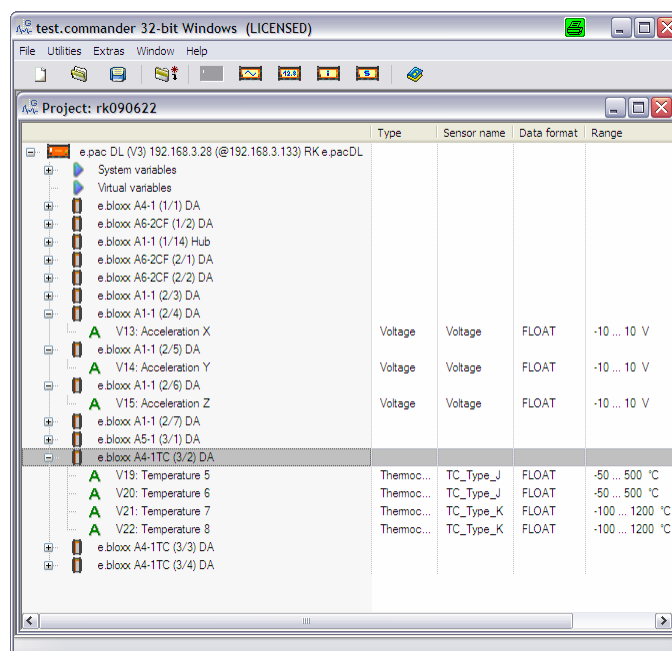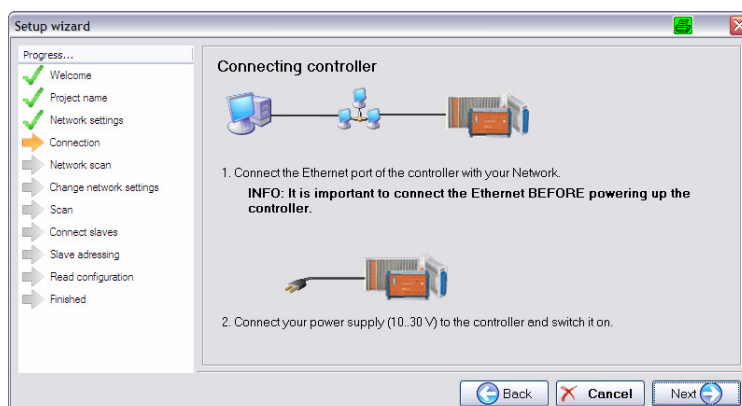
Test Controller settings

The Test Controller can be configured in a window subdivided into the following groups:

Module interface
Configuration of controller UARTs (baudrate, timeout…)

Host interfaces
Configuration of Ethernet interface, FTP client/FTP server, email, field bus interfaces, EtherCAT, Profibus, CANopen
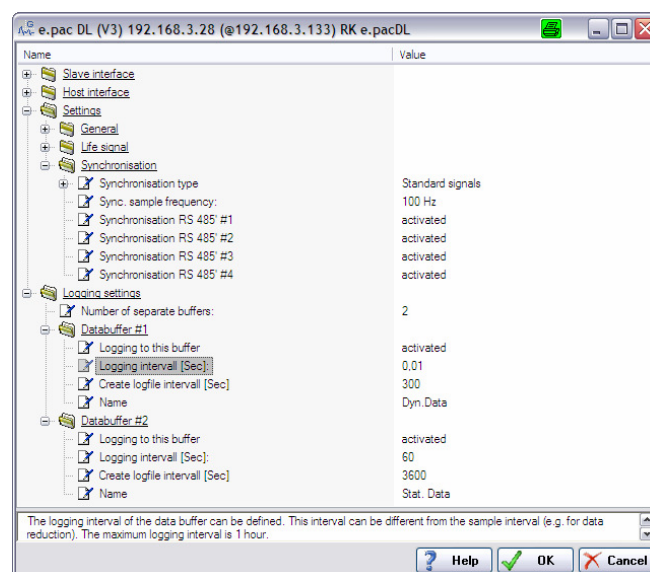
General settings
Location of unit, activation of PAC, buffer pre-initialization
Definition of conditions for "Watchdog" function

Synchronization
Test Controller and measuring module, scanning rate for each UART

Logging settings
Number of buffers, logger control, logging interval and length of log file, name of logger

Adjustment of measuring points

The measuring points can be calibrated either by entering the calibration data or online by measuring the sensor load.

It is also possible to zero the measuring points in the same window. After setting, the modified zero or calibration values are written to the module.
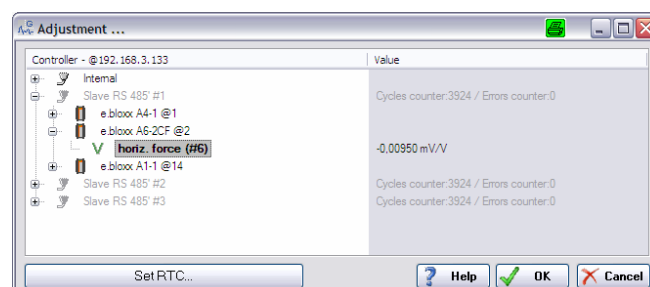
Virtual variables

In addition to the measured and I/O values, virtual variables can also be defined.

Mathematical and numerical calculations
Statistical considerations such as standard deviation
Diagnostic functions
Control functions with Boolean operations
Communication settings (FTP, Email)
System monitoring features such as degree of memory use

All functions can be linked with one another and with the measuring and I/O signals.

Service programs and support features

The test.commander offers additional tools to ensure particularly convenient operation of the measuring system for users.

Network terminal for incorporation of system in a network
Firmware update tools for controllers and modules
Controller clean-up.
Deleting flash memory.
Rules for automatic assignment of channel names.
Password-protected access operations to various levels.
Status information and calculation of use of controller capacity.
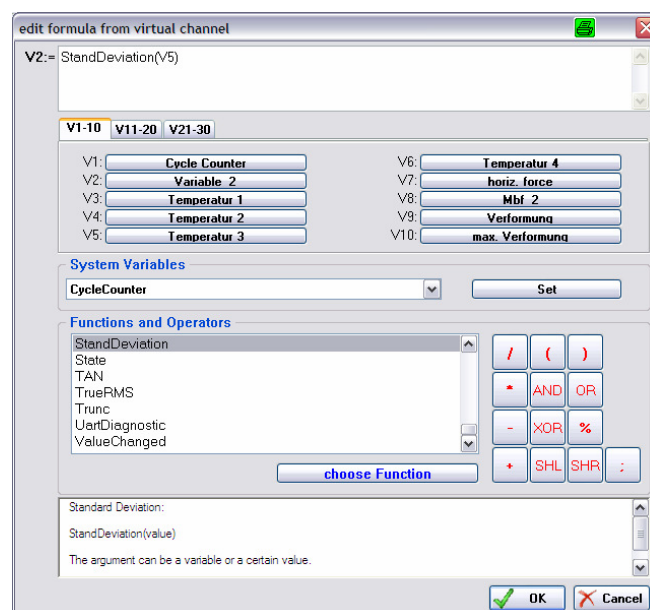
Online visualization of measured data

The measured values and the states of the I/Os can be checked numerically online. Moreover the integrated test.viewer makes it possible to display measured data on a time axis as well as an X/Y function or as a frequency spectrum.

The zoom feature also allows the display to be resolved right down to the individual measuring point even with highly dynamic signals. The differential measurement tool allows simple analysis and plausibility checks on measured data.

To keep representation clear even with a large number of channels and variables, it is possible to consolidate these into groups and show or hide the groups as well as the individual values.

The test.viewer allows the measured data to be saved in various formats including: DASYlab, Famos, MATLAB, GreenEye, Bernard, 16 bit Wave or Excel.

A configured project (settings, amplitude and time axis, visualized values, curves and background colors, subdivision of measuring window, etc) can also be saved as such and called up at any time.

Offline visualization of data stored in controller

The scope of features described is also fully available for reading out the stored data.

The following types of storage devices can be used:

Controller ring buffer
Controller flash memory
USB memory expansion
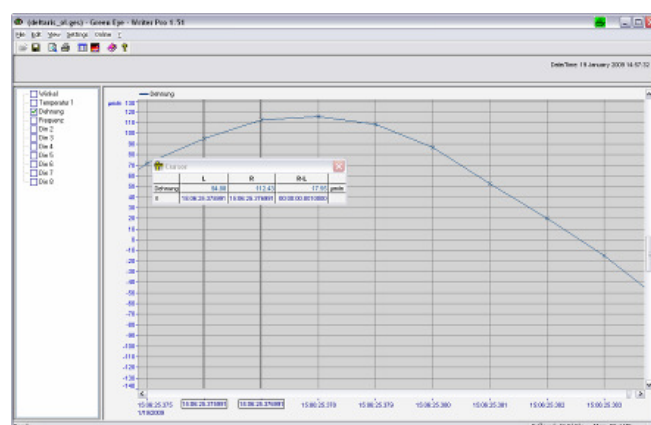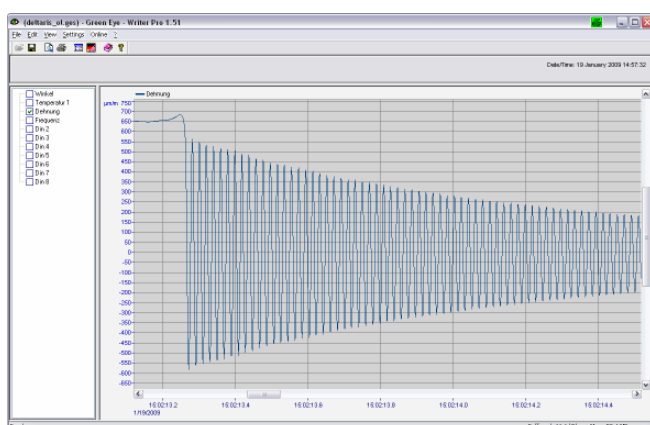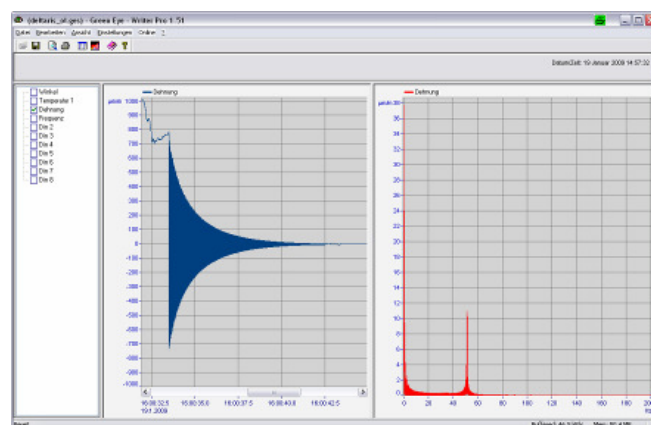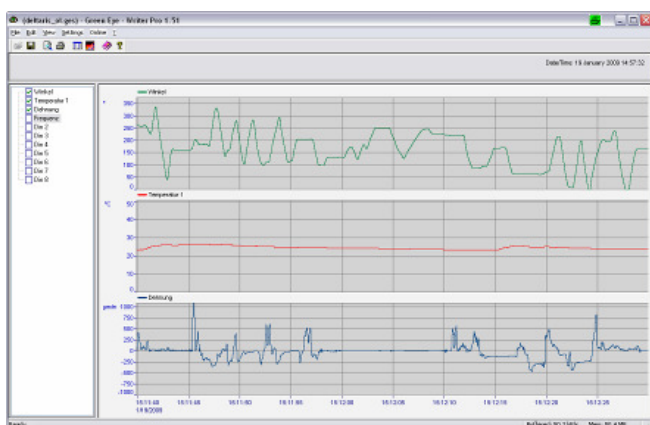
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