

OPERATION MANUAL

TRANSCAL 7280-P001 Evaluation software

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1. General information

1.1 License conditions for burster software

Copyright in this software is owned by the manufacturer.

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1.2 Intended use

The 7280-P001 software is used to set up, control and read output from the 7280. Other functions of the 7280-P001 software are to receive, display and store measured values. Any other use shall be considered improper use.

1.3 Symbols used

Residual risks that occur when working with the 7280-P001 software are indicated in these instructions by the following symbols:



Warning:

Indicates a possible risk of serious or life-threatening injury.



Caution:

Indicates a possible risk of damage to the product, process or surroundings.



Note:

Additional information.



Important / tip:

Indicates additional detailed technical information.

1.4 System requirements

To run the 7280-P001 software version 1.03.2 or later, you need a PC that meets the following system requirements.

- Intel Pentium or equivalent processor, 500 MHz or faster
- Windows 2000, Windows XP, Windows 7
- 128 MB RAM
- An interface for connecting measuring instruments
- (USB, RS232 (COM1, COM2, ...))

1.5 7280 version numbers

The 7280-P001 software is suitable for the 7280 V1.12 or later.

1.6 Installation

As the program is an executable file, no installation is necessary. Simply double-click on this file to launch the application.

2. Introduction

2.1 Product description

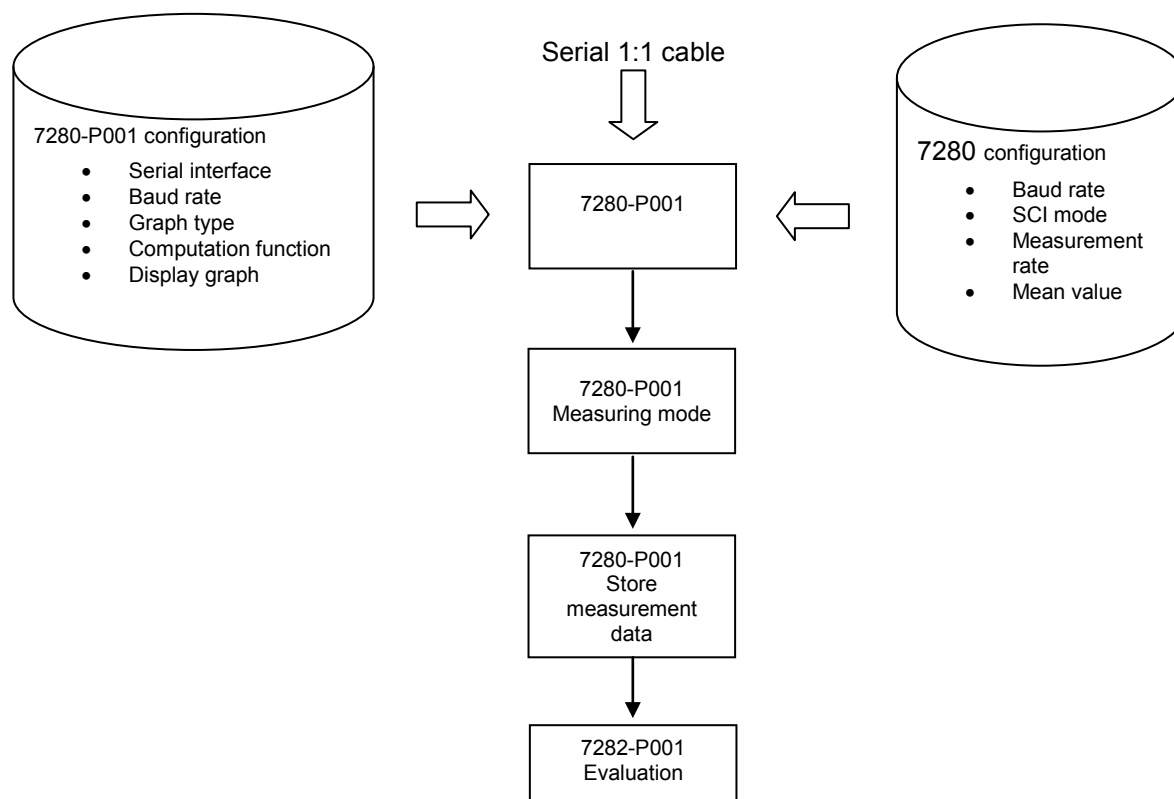
This operating manual describes characteristics and installation sequences for the 7280-P001.

2.2 Design of the software

The 7280-P001 software comprises the following components:

- Configuration options for the 7280-P001 software
- Configuration and control options for the 7280
- Readout for displaying measurement data
- Saving the measurement data

2.3 How the software works



2.4 Safe and correct use

Caution:

- **Ensure correct sensor calibration.**
- **Ensure correct configuration of the 7280-P001 software. The operator and constant for calculating the measured value are particularly important.**
- **When saving the measurement data, use meaningful file names.**

2.5 Setting up a USB connection

The USB driver is also on the CD "7280-P001 Evaluation software."

Set up a connection between the 7280 and a PC via the USB port as follows:

- You need the software CD, a PC, and the 7280 device.
- **Don't** connect the 7280 to the PC yet!
- Insert the CD into the PC.
- Install the USB driver on your PC.
- On the 7280 device, under item "2.3 SCI/INTERFC", select the "USB" interface and under "2.3 SCI/BAUD" select the desired baud rate.
- Now connect the 7280 device to the PC and launch the software on the PC.
- On the PC, under the "Settings/port" menu item, select the COM port named "XXXXXX USB Sensor" and in the same menu window select the same baud rate you selected on the device.

Communication setup is now complete and the device can be used in the same way as via the RS232 interface.

2.6 Measurement rate 1000/s and LOGG mode 1 ms

During measurement at a rate of 1000/s and in the active LOGG mode with 1 ms, it is not possible to read out measured values using the PC software under the "Logger" tab. This is because the measured values are being written to the device's internal memory ten times faster than they are output via the interface.

3. Description of operation

The application window contains a menu bar and the area below it in which there are multiple tabs. Software settings can be changed via the menu bar (e.g. language, port, ...) The tabs let you set up, control and read out data from the 7280. On the "Measure" tab, the measured values are displayed as a graph.

3.1 Application menu bar

File – Save:

Depending on the active tab, you can save measurement data or parameter data to a file.

File – Print:

Depending on the active tab, you can print out various types of information.

File – Exit:

Quits the application.

Settings – Port:

Use this to configure the port.

- Baud rate: 2400 Bd, 4800 Bd, 9600 Bd, 19200 Bd, 34800 Bd or 115200 Bd
- Data bits: 8
- Parity: none
- Stop bits: 1
- Flow control: none

Settings – BCD HEX display:

Use this option to show an additional display field at the bottom of the application window. This field displays all the characters that are received from the 7280. They can be shown either as ASCII or hex.

Language:

You can choose the language for the 7280-P001 software here. All text strings in the application are changed into the selected language.

The following languages are supported:

- German
- English
- French
- Spanish

When you relaunch the application it remembers the last language setting.

Help – Info:

The software version number appears here.

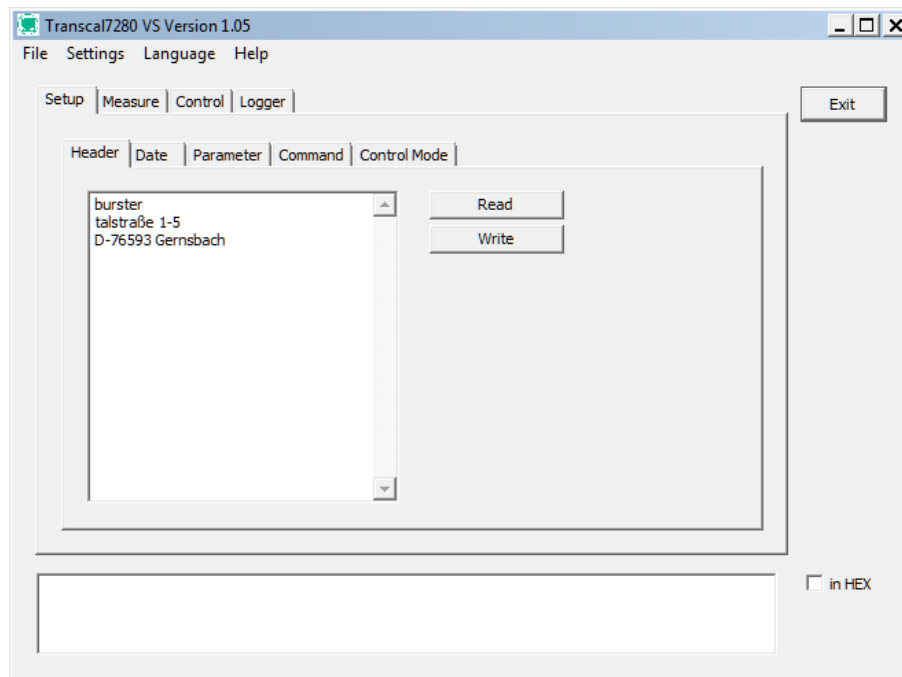
Help – License:

Contains the license conditions for burster software.

3.2 Application tabs

3.2.1 Setup

3.2.1.1 Setup – Header tab

**Text field:**

The user's address or other text can be entered in this box. The 7280 can receive a maximum of 256 characters.

Read:

Click this button to read the contents of the header.

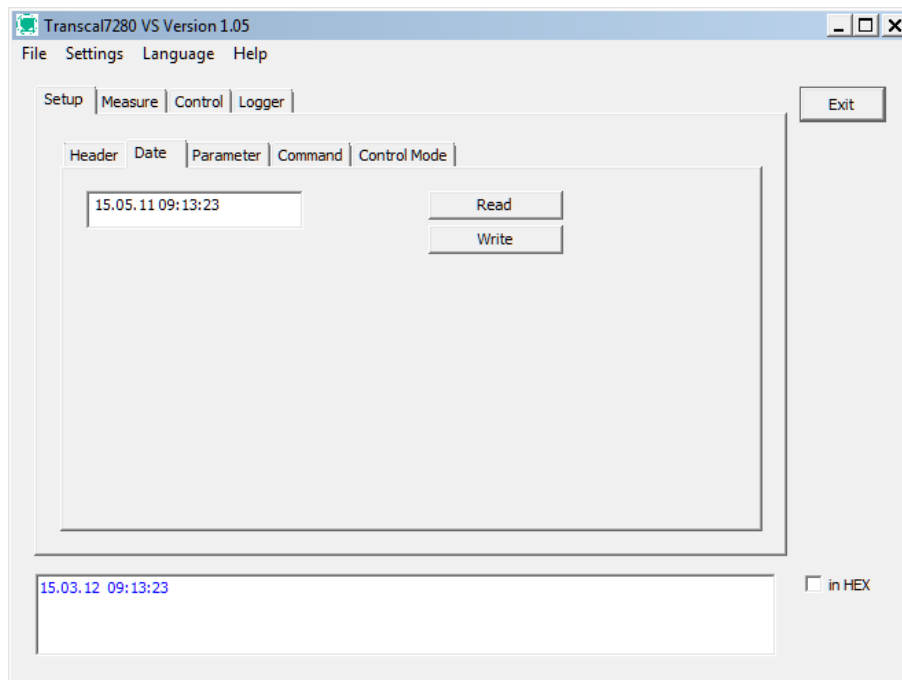
Write:

Click this button to send the contents of the header to the 7280.

File – Print:

Prints the header.

3.2.1.2 Setup – Date tab



Text field:

The field at the top displays the time read from the 7280.

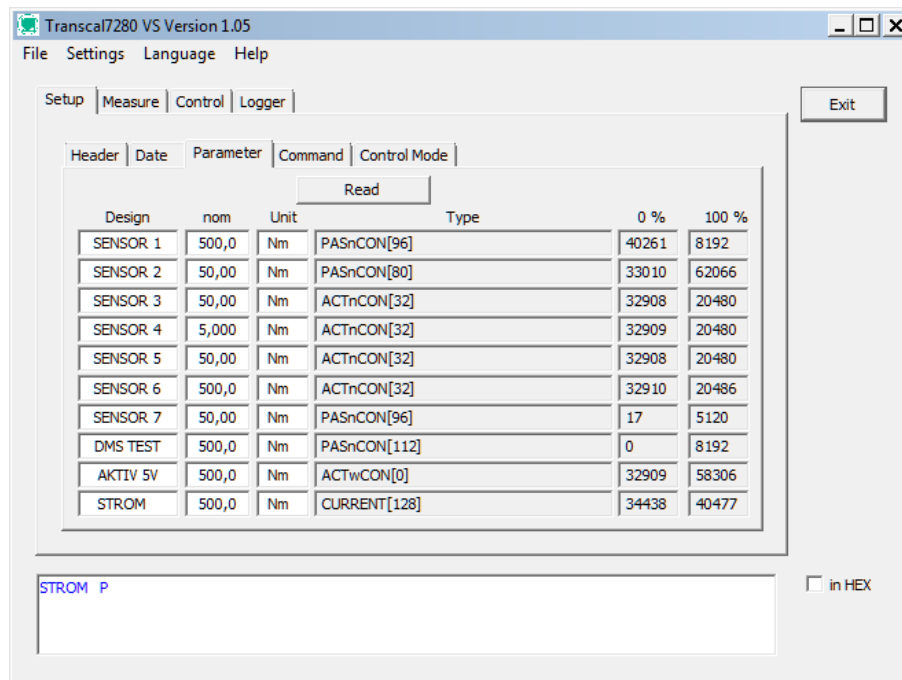
Read:

Click this button to read the time from the 7280.

Write:

Click this button to send the PC's system time to the 7280.

3.2.1.3 Setup – Parameter tab



Read:

Clicking the "Read" button reads and displays all parameter sets stored in the 7280.

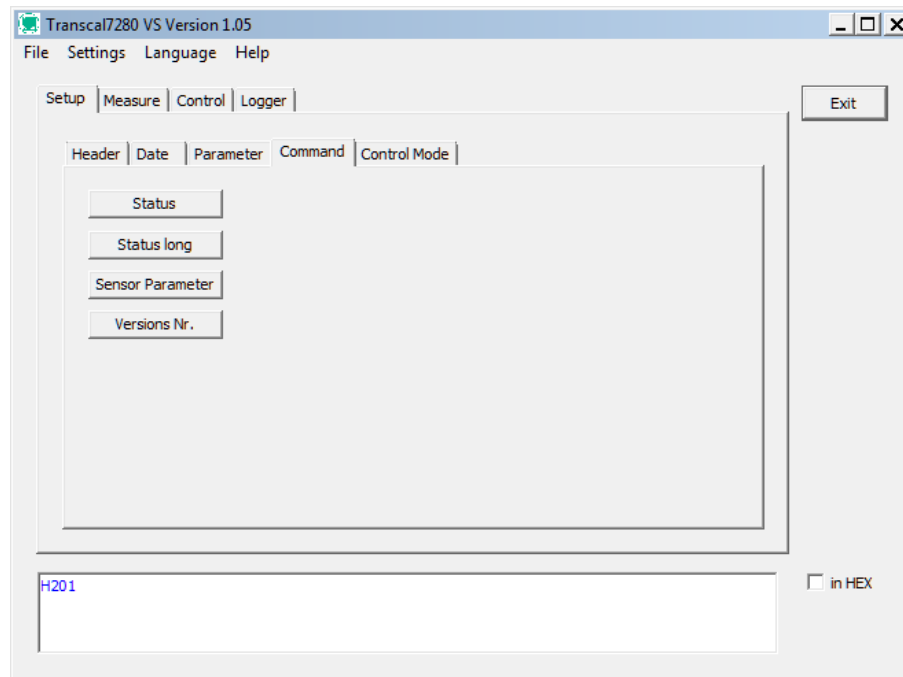
File – Print:

Prints the parameter sets.

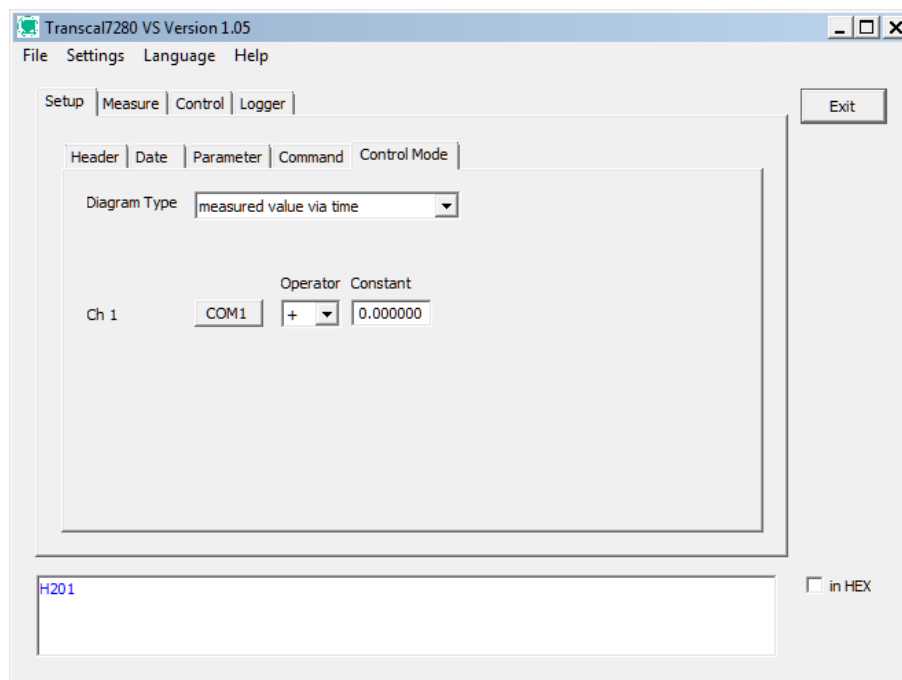
3.2.1.4 Setup – Command tab

The buttons on this tab let you view various system settings from the 7280. To display the received parameters, the Settings – BCD HEX display option has to be ticked. Then an additional display field appears at the bottom of the application window. All characters received from the 7280 are displayed here as ASCII or hex.

A description of the commands can be found in the operating manual for the 7280, in the section **Serial Interfaces command overview**.



3.2.1.5 Setup – Control Mode tab

**Diagram type:**

The "measured value via time" option shows the changing force across the time axis.

Interface connection:

The interface connection is set according to the selected diagram type.

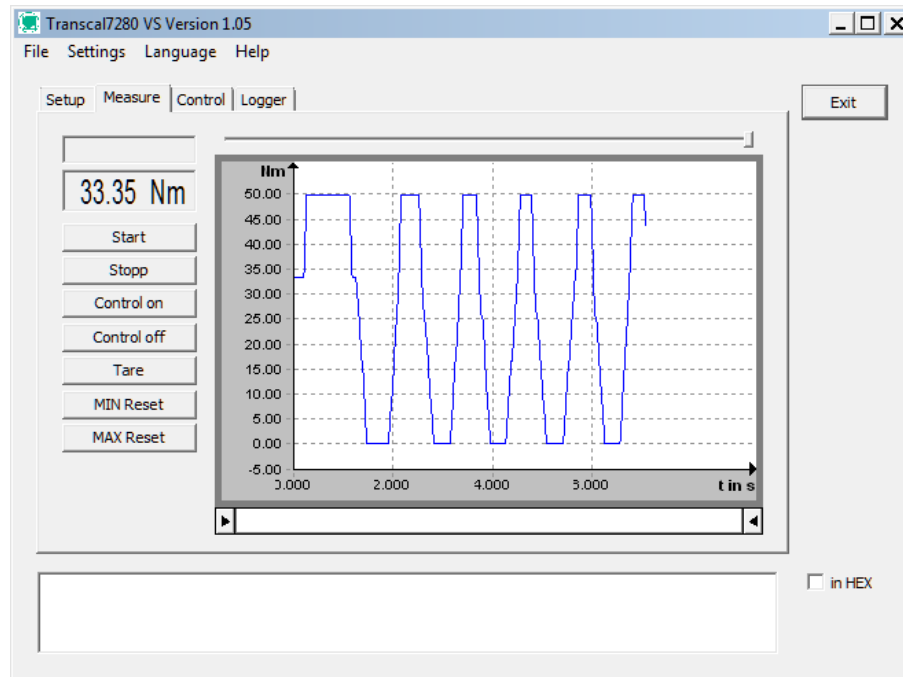
Ch 1:

- COM button: Opens a dialog that lets you set the serial interface and baud rate.
- Operator: Arithmetic operator for calculation function.
- Constants: This constant is offset against the measured value using the operator.
- Display: When this option is ticked, the graph is displayed in the measurement window.

Apply button:

To save your settings, click the "Apply" button once.

3.2.2 Measure tab



Field on the left: The top field shows the current SCI mode that is set on the 7280.

Field below it: Displays measured values and the unit.

Start: Starts measurement. If you want to save measurement values in a file, you have to create a file before starting the measurement process.

Stop: Ends the measurement process.

Control on: Clicking this button switches on the 100% control in the sensor (sensor option).

Control off: Clicking this button switches off the control signal (sensor option).

Tare: Clicking this button tares the display. **Please note:** Tare should only be clicked after clicking "Start".

MIN reset: Resets the MIN value.

MAX reset: Resets the MAX value.

File – Save:

Measurement values can be saved in two ways:

- As a CSV file
- As a BMP file

File – Print:

Prints the displayed area of the graph.

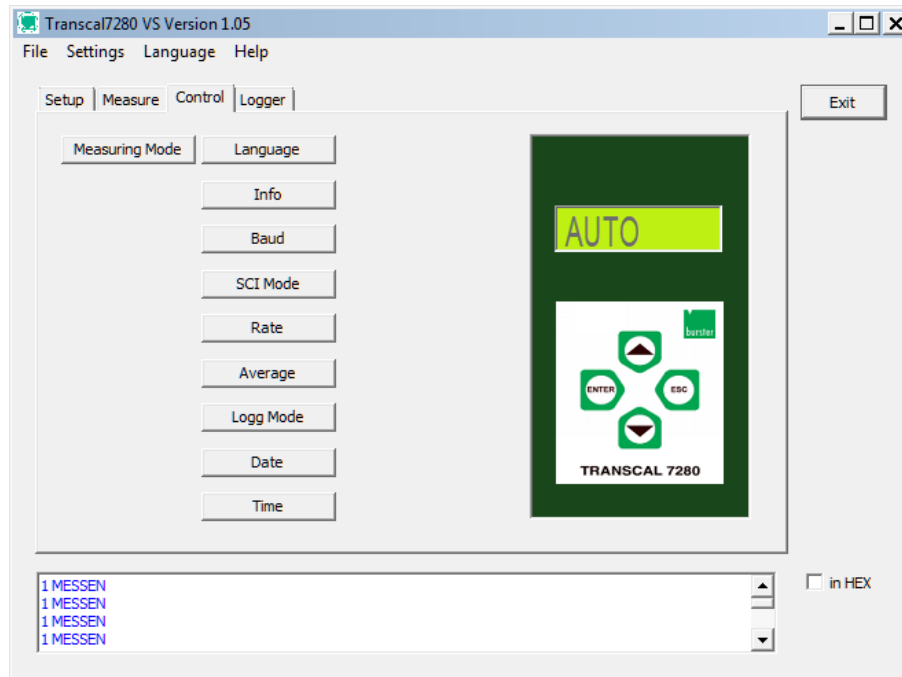
Graph functions:

The slider underneath the graph lets you zoom out from an area of the measurement graph. Click on the ends of the slider and move the mouse. You can scroll through the entire measurement graph by sliding the bar. Right-click on the white area and move the mouse.

Graph functions, the context menu:

Contains the following commands: zoom in, zoom out, scrolling, gridlines on/off, show legend.

3.2.3 Control tab



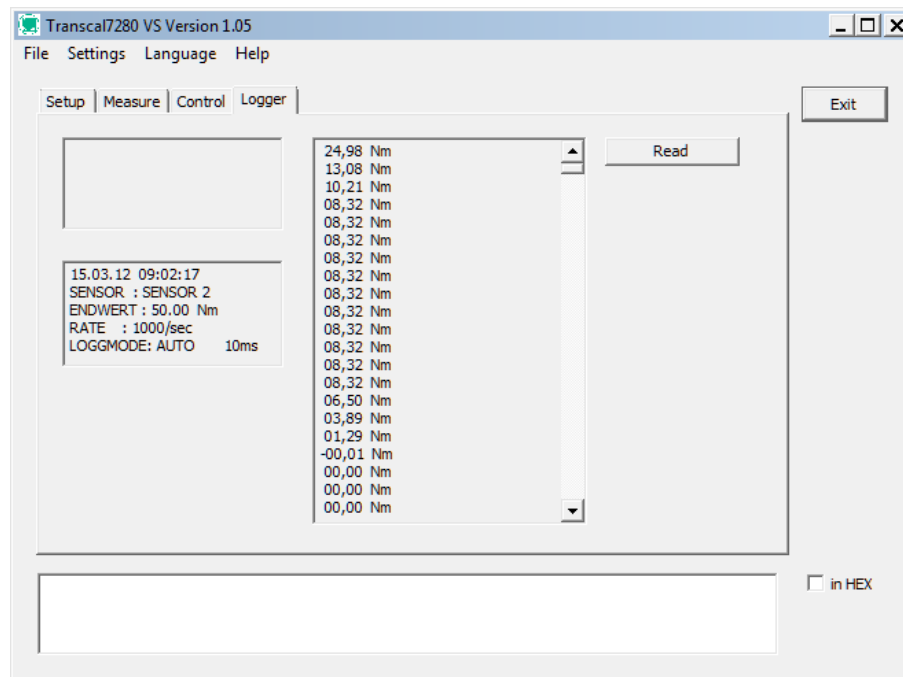
Use these buttons to control the 7280 from the PC.

▲, ▼, ENTER and ESC:

Use these buttons to control the keys on the 7280 from the PC.

Buttons for menu items on the 7280 that have a scroll function (when you hold down the button it automatically repeats) are not available (e.g. 2.6 LCD brighter – darker has no function).

3.2.4 Logger tab



The **first field** at the top left displays the header from the 7280.

The **field below it** shows the sensor parameters and the measurement parameters set for recording the measured values.

The **field on the right** displays the measured values.

Read: Click this button to read the contents of the data logger.

File – Save:

Saves the data in a CSV file.

Note:



A CSV file is a text file used to store simple structured data. CSV stands for character separated values or comma separated values. The values are separated from each other by special separator characters such as a comma or semicolon. You can open CSV files in Excel by double-clicking on them.

4. Troubleshooting

- Communication problems can occur with some USB adapters. Certain USB adapters do not correctly transmit the data from the 7280 to the PC. Sometimes characters are suppressed or converted into different characters. You will then see an "incorrect parameters" error message in the measuring mode. A tested USB adapter is listed on the 7280 data sheet.
- Your operating system is Windows 98. The 7280-P001 application cannot be launched because Windows 98 is no longer supported.

5. Auto power off during battery/mains operation

If the 7280 is connected to the interface and is not being used in measurement mode, the automatic power-off function is still active. **The device will automatically switch off after a short period of time.** Auto power off is only disabled during the measurement process. After a short period of inactivity the 7280 will switch itself off.