

Scanntronik Mugrauer GmbH

Parkstraße 38 • 85604 Zorneding • Germany

Phone: +49 (0)8106 22570 • Fax: +49 (0)8106 29080

Internet: www.Scanntronik.de • E-Mail: Scanntronik@t-online.de

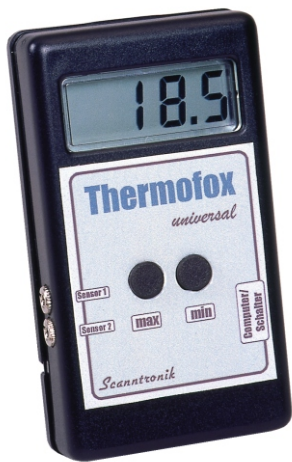
What's a Data Logger ?

The high-quality data loggers from Scanntronik capture, record and store measuring data of all kind, such as the temperature, the air, material or textile moisture, the voltage, the current etc. over several years and do not lose these data when the batteries go flat.

The measuring results thus collected can be displayed in a very well structured format on a VDU, which comes with a lot of our equipment, just by pressing the relevant button. Moreover, the data can be printed out with the help of a flexible and portable miniature printer or, even more comfortably, evaluated with the right software on your PC.

When adapted accordingly, our products can be used as data logger units for recording any physical parameters. So, if you do need a customized design just give us a ring. A high degree of competency, reasonable prices and short development periods are our strong points.

Thermofox Universal



Its flexible sensitive sensor equipment makes this data logger a thermograph that can be used anywhere. Designed to be operated completely independent of the PC, Thermofox Universal measures the temperature from up to 3 sensors at a time and automatically stores them in its memory. The large display shows the current temperature and the maximum and minimum values of the last few days when you press a button. The readings can also be transferred to your PC and further processed there with an efficient software.

The Smart Temperatur Controller

Technical Facts
Applications: storing goods, air conditioning etc.
Sensor equipment: 1 x internal sensor (-10° .. + 50°)
Opt. equipment: 2 x external sensors (-30° .. + 120°)
Memory: 4,000 readings (up to 65,000)
Readings remain in the memory without a battery
Recording interval: one second to 24 hours
Extreme readings between recording points
Also possible to measure temperature differences
Resolution: 0.1° C, Tolerance: 1°C
Precision built-in quartz clock and calendar
Alkaline mikrobatteries lifetime approx. 1,5 years
Dimensions: 10 x 6 x 2 cm, 100g incl. Batteries

Thermofox Pro



The Thermofox Pro is a data logger for sophisticated and refined demands. With its water-proof IP 67 casing and the high-quality industrial plug-in connectors, the Thermofox Pro can resist even the most adverse ambient conditions. It stands out from similar products due to its highly shock-resistant casing and the water-proof foil wrapped keys. As compared with the standard design of the Thermofox, the enlarged battery set allows the device to be operated up to four years off the line (internal temperature sensor and 24-hour interval).

Hard Shell, Clever Core

Technical Facts
Protection class of the casing: IP 67
High-quality industrial plug-in connections
Sensor equipment: 1 x internal sensor (-10° .. + 50°)
Opt. equipment: 2 x external sensors (-30° .. + 120°)
Optional Thermo-Hygro sensor available
Memory: 16,000 readings (up to 65,000)
Readings remain in the memory without a battery
Recording interval: one second to 24 hours
Extreme readings between recording points
Also possible to measure temperature differences
Resolution: 0.1° C, Tolerance: 1°C
Mignon battery lifetime up to 4 years
Dimensions: 15 x 8 x 3 cm, 250g incl. Batteries

Thermofox Multisensor

11-Channel Temperatur Data Logger

The Thermofox Multisensor makes it possible to capture up to 11 temperatures concurrently. Eight up to 15 m long inexpensive NTC sensors can be attached directly at the socket connector of the sensor module, with two further NTC sensors being connected with the base unit. One sensor is inside the base unit. The keys of the data logger allow the selection of individual channels on site even without a PC and the reading of the measuring results. Parameters, such as the measuring interval, the date, the calendar or the hysteresis, can be set with the help of the PC software which is available separately.



Technical Facts	
Memory:	4,000 readings (up to 65,000)
Readings remain in the memory without a battery	
Recording interval:	one second to 24 hours
Extreme readings between recording points	
Sensor equipment:	1 x internal sensor (-10° .. + 50°)
Opt. equipment:	10 x ext. sensors (-30° .. + 120°)
Automatic sensor detection	
Also possible to measure temperature differences	
Precision built-in quartz clock and calendar	
Resolution:	0.1° C, Tolerance: 1°C
Alkaline mikrobatteries lifetime approx.	1,5 years
Dimensions:	15 x 6 x 2 cm, 100g incl. Batteries

Thermofox Mini

The Miniformat Temperatur Controller

Only as big as a matchbox, this Mini is ideally suited to accompany such things as freshly refrigerated good on trips. When you arrive, you just insert it into the miniprinter and you get the temperature values black on white during transportation. Or you read it out on the PC because the Mini is a full-value data logger for the price of a one-way? You can also get it at your choice with an internal sensor or puncture sensor to record such things as how the core of freshly stored meat goods cool off.



Technical Facts	
Memory:	4,000 readings (up to 16,000)
Recording interval:	one second to 24 hours
Extreme readings between recording points	
Measuring range:	-10° C .. +50° C
Resolution:	0.1° C, Tolerance: 1°C
Lithium battery lifetime approx.	1.5 years
Dimensions:	35 x 55 x 15 mm, 30g incl. Battery

Mini - Printer

Perfect Mobility - Everywhere



Just connect it up to one of our data loggers and you'll be getting the stored values black on white on 58 mm normal paper. Thanks to battery operation and the 350 g lightweight, it is ideal for mobile certification of such things as the correct cooling during transportation to the receiver.

Technical Facts	
Compatible with Thermofox series, Mini Ultra, Room Atmosphere Controller, Hygrofox etc.	
Batteries, 58mm normal paper and data logger connection interface included	
System can also be used as a printing calculator	

Mini Ultra

A Miniature Data Logger For Highest Demands

The Mini Ultra is a fully adequate miniature data logger satisfying the highest demands. In addition to the basic functions of the Thermofox Mini, it has a data memory for 32 000 temperature readings and has been designed especially for critical ambient conditions. Its temperature range is between -30°C and +80°C, so that it cannot only be directly used for the measurement of increased temperatures, but is also suitable for monitoring chilled and frozen goods. Its standard class of protection is IP 65, but it is also available as an IP 68 version.



All this makes the Mini Ultra the ideal device to put its features to the test even in the most unusual places, such as directly under a thick layer of snow or in a dish-washer. Since the micro-processors we install have extremely low power consumption, the data logger can work for five years and longer.

Technical Facts	
Applications: Monitoring of dish-washers, washing machines (IP 68), shipping, air conditioning etc.	
Output for an alarm or controlling any other device	
Stores up to 32000 readings (included)	
Recording interval:	one second to 24 hours
Extreme readings between recording points	
Readings remain in the memory without a battery	
Precision built-in quartz clock and calendar	
Operates with a high-quality lithium battery which allows a service life of more than 5 years	
Measuring range:	-30° C .. +80° C
Resolution:	0.1° C, Tolerance: 1°C
Dimensions:	40 x 80 x 20 mm, 50g incl. Battery

Room Atmosphere Controller



It is simply fastened with a special removable glue strip at the desired place for measurements. The electronic safety device registers any manipulation of the data logger. If readings show a humidity of more than 60 % over a longer period of time, these are the conditions to critical forming fungus. Fungus not only destroys walls, wallpaper, floors and interior fixtures, but they also lead to various illnesses such as allergies and infections.

Temperature And Humidity Recording

Technical Facts

- Long-term monitoring of room atmosphere
- Built-in electronic manipulation sensor
- Complete recording of humidity and temperature
- Memory: 4,000 readings (up to 16,000)
- Resolution: Humidity 0,3%, Temperature 0,1°C
- Tolerance: Humidity 4,0%, Temperature 1°C
- Dimensions: 11 x 6 x 2 cm, 100g incl. Batteries

Hygrofox



Hygrofox measures and stores temperature (-10 .. +50°C) and relative humidity (0 .. 99%). It's display shows the current readings and the minimum and maximum values of the last days by pressing a button. Furthermore, you may print out the readings on the Mini - Printer or also transfer it to your PC and evaluate it with a convenient software there. Because it is uncomplicated to operate, this robust and practical hygrothermograph is used in producing and processing foods, in air conditioning units, in laying parquet floors, in winter gardens or greenhouses.

The Electronic Hygrothermograph

Technical Facts

- Memory: 4,000 readings (up to 65,000)
- Extreme readings between recording points
- Opt. equipment: 2 x external sensors (-30° .. 120°)
- Hygo module can be separated
- Resolution: Humidity 0,3%, Temperature 0,1°C
- Tolerance: Humidity 4,0%, Temperature 1°C
- Alkaline mikrobatteries lifetime approx. 1,5 years
- Dimensions: 14 x 7 x 2 cm, 150g incl. batteries

Universal HUB

One Times One Equals Four



Are you interested in measuring the relative air humidity in several places at the same time ? Our Universal HUB makes it possible. The Universal HUB provides the opportunity to operate up to four hygro-thermo sensors at the same time with your Thermofox or your Hygrofox. The data logger can now record the relative air humidity as well as the temperature in four places at the same time with the help of the Universal HUB. The sensors with their sensor lines can be laid within a radius of 20 m, thus facilitating a measurement virtually in any possible place. The Universal HUB is directly supplied with power by the connected data logger.

Materialfox

The Easy Way To Do Humidity Analyses



The Materialfox is an efficient and multi-talented instrument for recording the humidity situation of a variety of materials. Measuring is done through the measuring peak sensor or with two terminals that are fastened on two specimens. The data logger displays and records either the current resistivity or the relativ humidity value (humidity equivalent) of the material analyzed.

Technical Facts

- Memory: 4,000 readings (up to 65,000)
- Logger operation: readings automatically stored
- Button operation: storing by pressing a button
- Resistivity: $10 \cdot \log(R)$ of 20 kOhm to 500 MOhm
- Thermo-Hygro sensor may also be connected

Materialfox Mini

The Smallest Way To Record Material Humidity



Only as big as a matchbox, this data logger is the miniaturised answer to a lot of questions in humidity analysis. The Materialfox Mini offers you the possibility of recording readings at up to three points completely independently for more than a year. The stored readings can be issued with PC software or with the miniprinter right on location.

Technical Facts

- The same basic characteristics as the Materialfox
- Three pairs of measuring terminals included
- Logger operation: readings automatically stored
- Precision built-in quartz clock and calendar
- Dimensions 35 x 55 x 15 mm, 30g incl. Batteries

Materialfox Multisensor

Expand Your Materialfox Into A Measuring Center



The Materialfox Multisensor has been developed as a supplementary module for the Materialfox and will simply be connected with the Universal Bus of the data logger. Our logger can now measure and record the material moisture in up to ten places at the same time when connected with the Multisensor.

Technical Facts

- Materialfox extension modul (Universal Bus)
- Eight additional channels for the Materialfox
- Peak sensors or measuring terminals available
- No additional power supply required
- Dimensions: 55 x 90 x 25 mm, weight: approx. 55 g

Voltfox Mini

A Data Logger Live In The True Sense of the word

In the case of the Voltfox Mini, the temperature sensor has been replaced by an A/D converter, so that voltage and current values can now be recorded. Apart from measuring the voltage ranges of 0 - 2 V, 0 - 5 V, 0 - 10 V and 0 - 20 V, the Voltfox Mini can also measure currents between 0 and 20 mA and is available for special voltages on request. The readings can be directly converted into a corresponding linear physical parameter, such as pressure or light output. The Voltfox Mini has not only a number of new features, it also retains the many advantages of our data logger family.



The readings can be directly converted into a corresponding linear physical parameter, such as pressure or light output. The Voltfox Mini has not only a number of new features, it also retains the many advantages of our data logger family.

Technical Facts

- Memory: 4,000 readings (up to 16,000)
- Recording interval: one second to 24 hours
- Extreme readings between recording points
- Lithium battery lifetime approx. 1.5 years
- Input impedance: 1 Mohm
- Resolution: 8-bit analog-digital converter
- Tolerance: 1% - 2.5% (range dependent)
- Dimension: 55 x 35 x 15 mm, 30g incl. Battery

Netzfox

Observing The Power Supply Network



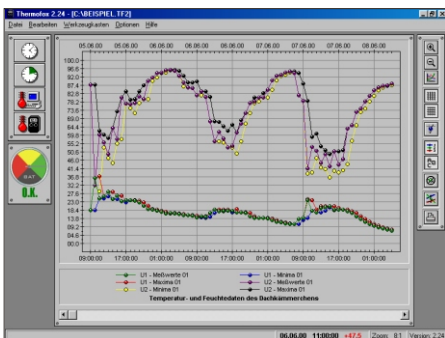
The Netzfox is an electronic data logger that registers the voltage of the 230-V power system continuously simply by plugging the device into the wall socket. The PC software allows a detailed graphic analysis of the voltage curve and the simple configuration of the system. The logger's response time is less than 2 sec, so that abrupt changes of the voltage in the net or voltage drops can be safely recorded.

Technical Facts

- Memory: 4,000 readings (up to 16,000)
- Lithium battery lifetime approx. 1.5 years

Thermofox - Software

Graphic Analysis And Detailed Evaluation With The PC



Can be used with all our products! The software allows the individual configuration of all our data loggers, apart from the graphic analysis and the processing of the readings. You can, of course, set any measuring interval. You can also have the dew point curve calculated, configure the clock or the calendar integrated in our devices. It goes without saying, that you may also query functions, such as the switching output, the calibration and equipment information. The instruments are connected via a serial PC interface which is included in the scope of supply for the Thermofox software. You may also export the measuring data to other programs, such as Excel, without any problems. So all additional options of this software can be used.

Accessories

All You Need For Professional Analysis

External temperature sensors:

- Cable length: 1.5m
- Cable length: 3 m
- Cable length: 6m / 10m / 15m
- Surface sensor
- Puncture sensor
- Low - Temperature sensor

Memory expansions:

- 16000 readings
- 32000 readings
- 65000 readings

- Wall fastener
- Logger box

Standby suitcase

- Size I: 23 x 15 x 4,5 cm
- Size II: 27 x 18 x 8,0 cm

Materialfox sensors

Thermo-Hygro sensor

For futher equipment just give us a call. The warranty period for all Scantronik data loggers is 24 months.