

Universal Data Logger



Advance notice, Available from End of February 2002

HOTBOX SE

Universal data logger for signals:

- 2 channels: NTC temperatures -50°C .. $+140^{\circ}\text{C}$
- 2 channels: Signals 4mA .. 20mA
- 2 channels: DC voltages, programmable +/- ranges

(DC ranges programmable for Hygroclip humidity and temperature sensor)

Out of the 6 channels any 4 channels can be selected to record the data.

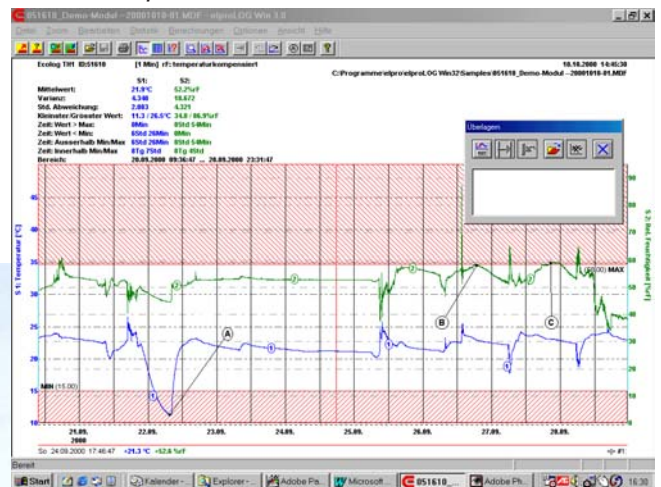
Easy configuration, 64'000 of measured values, large display, sensor supply by Datalogger, alarm possibility etc. Evaluation software: elproLOG WIN.

Ideally for the autonomous recording of any measured value of a sensors or a signal transmitter:

- Pressure in a process
- CO_2 concentration in the environment
- gas concentration as O_2 or others
- electrical data as current or voltage
- temperature
- humidity and temperature combined
- speed of air in a conduct
- depth of water in a river
- force applied to a probe
- or any combination

Supply of the sensors is done by the HOTBOX SE, using internal batteries or a net supply, controlled by a special power save procedure.

software: *elproLOG WIN*



HOTBOX SE with different sensors



HOTBOX SE

Features of data logger

Autonomous Measuring, Recording Displaying, Alarming

HOTBOX SE, the new data logger from the Swiss company ELPRO, is the ideal device for recording process data. It is simple to operate, easy to handle and can be adjusted quickly to suit all required measurement applications. It is possible to connect: 2 temperature sensors, 2 probes with 4..20mA and 2 sensors with DC voltage signals. The large display shows the values measured by the sensor, in the unit of measurement selected by the customer, periodically and independent of the storage cycle. Any 4 channels can be selected for recording the measured data in the memory which has a capacity for 64,000 data points. You can display recorded data at any time in the form of a graph on the PC.

Mobile Use for Service and Installation Technicians

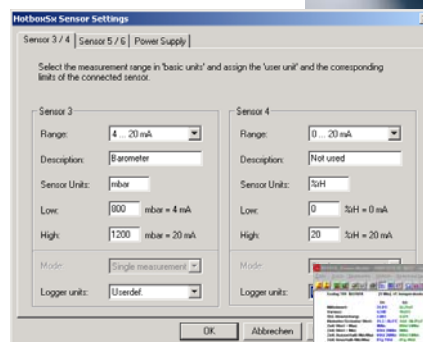
For example, high pressure 0..30 bar, low pressure 0..10 bar and 2 temperatures -50°C to $+140^{\circ}\text{C}$ for in-flow and return-flow are recorded. Or the speed of air flow in m/s is shown in conjunction with temperature and air humidity. This simplifies system optimization methods and system acceptance report procedures. Customer sensors can also be connected to the device (screw clamps)

Sensor supply by internal batteries

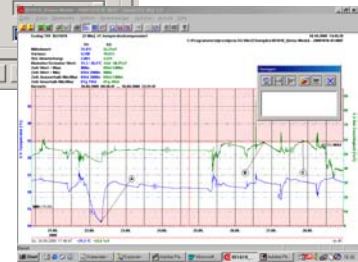
The brilliantly designed sensor supply and the energy saving mode allow you to use the device without an external energy supply for the sensors. A simple installation procedure allows you to create reliable documentation for processes in clean room atmospheres and test chambers. Differential pressure 0...100 Pa together with temperature and air humidity

easy handling

1. choose the sensor
2. configure
3. recording
4. analyse



*easy configuration:
To each sensor the
exact settings are
provided.*



are the most important quantities. Or, outdoors in a watertight box, it is possible to record the depth of groundwater or streams in conjunction with climatic values. Or, it is important to record and provide documentation about the air quality in large auditoriums. In incubators it is possible to record CO₂ values in conjunction with $^{\circ}\text{C}$ and %rH.

Alarms and easy evaluation of the data

Any sensor can be programmed to trigger an external alarm. ElproLOG the uncomplicated evaluation software displays measured values in the form of graphs and allows for many additional functions and the implementation of all ELPRO dataloggers. The motto, one software for all ELPRO dataloggers, simplifies documentation in connection with ISO quality assurance or GLP applications.

HOTBOX SE

Universal Data Logger and Accessories



Universal Data Logger HOTBOX SE



Advantages:

Freely programmable units such as pressure, CO2, m/sec, etc.
 capacity for 64'000 data points
 Autoscroll Display (all channels are alternating displayed)
 Sensor supply by internal batteries 2x 9V = 18V
 Link for external sensor supply

Easy PC analyse with elproLOG WIN Software
 Online representation over user terminal program or Hyperterminal
 Alarm output over inserted DC switch
 Connectors: DB15 for PC, printer, terminal
 4-pins for 2x NTC Temperature probe
 5-pins for 2x 4-20mA signals
 7-pins for 2x DC signals and sensor supply

Data Logger HOTBOX SE Art. Nr. 2501
 Suitcase with PC Software and PC cable Art. Nr. 2810-SE



connectors for sensorlinks

connector 4p with terminals (for 2x NTC probes) 2540-P4
 connector 5p with terminals (for 2x4-20mA) 2540-P5
 connector 7p with terminals (für 2xDC signals) 2540-P7
 Mounting to connector and testing (without material) 2540-B



pressure transmitter stainless steel

pressure transmitter -1..9 bar, G 1/4", 4..20mA 3280-A
 pressure transmitter -1..24 bar, G 1/4", 4..20mA 3280-B
 pressure transmitter 0 .. 1 bar, relative, G 1/2", 4..20mA 3280-C
 > pressure transmitter from 0..0,1 to 0..4000bar on request



Temperature probes -50°..+140°C

NTC miniature temperature probe, small and fast 3055-L03
 Dipping probe flexible (only up to +110°C) 3093-L03
 Universal probe DS=6mm, LS=50mm 3090-L03
 > more types, until 50m cable, you will find in the ELPRO sortiment



Differential pressure in clean rooms

Differential pressure , -50.. +50Pa, 4..20mA 3260-L
 > other ranges on request



Humidity and temperature combine

Hygroclip Sensor humidity / temperature, DC 3088-A
 Extension cable 1m for Hygroclip (incl. connector 7P) 3216-L01



Depth of water recording with compensation

Water level transmitter T=0..10 meters, 4..20mA 3263-C
 > ranges from 0..2,5 m to 0..250 m are available



AC Current recording

Ampere clamp Mini2 for 1..150 Amp AC 3268
 Ampere clamp YCV5, for 2..500 Amp.AC 3269



Air quality in auditories: CO2 recording

CO2 transmitter 0..2000ppm, 0..10V/4..20mA 3271-F
 CO2 transmitter 0..2000ppm, for conducts 3271-G



air speed 0,3 .. 20 m/s

air speed sensor output DC 0..2V 3264-C
 air speed sensor output 4 - 20 mA 3264-D



Harmful gases: CO recording

CO Gas transmitter 0..300ppm, 4..20mA 3272-A

> other ranges and Meteo probes on request

> ask for suitable sensors for higher concentrations as well as other gases as O2, N2, etc.

HOTBOX SE

Configuration for some applications



Recording pressure at the compressor

For purposes of optimization, high pressure, low pressure and two temperatures are recorded simultaneously.

Material:

1x	HOTBOX SE universal data logger	2501
1x	Pressure sensor -1..9 bar	3280-A
1x	Pressure sensor -1..24 bar	3280-B
2x	NTC Temperature sensors -50°..140°C	3055-L03
1x	Connector for 2 NTC sensors	2540-P4
1x	Connector for 2 pressure transmitter	2540-P5
2x	Mounting to connector and testing	2540-B



Multiple recording for climat

Humidity and temperature in a conduct inclusive air speed. Additional temperature outside are recorded simultaneously.

Material:

1x	HOTBOX SE universal data logger	2501
1x	Hygroclip Sensor humidity / temperature	3088-A
1x	Extension cable f. Hygroclip	3216-L01
1x	Air speed sensor 0..20m/s, 4..40mA	3264-D
1x	Connector for 2 sensors 4..20mA	2540-P5
1x	NTC Temperature sensors -50°..+140°C	3090-L10
1x	Connector for 2 NTC sensors	2540-P4
2x	Mounting to connector and testing	2540-B



Fresh air monitoring

How much current uses the ventilation engine? What is the air speed in the air duct? All this and 2 temperatures are monitored.

Material:

1x	HOTBOX SE universal data logger	2501
1x	Air speed sensor 0..20m/s, 0..2V	3264-C
1x	Ampere clamp Mini2 for 1..100 Amp AC	3268
1x	Connector for 2xDC signal sensors 7P	2540-P7
2x	NTC Temperature sensors -50°..140°C	3090-L10
1x	Connector for 2 NTC sensors	2540-P4
2x	Mounting to connector and testing	2540-B

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