

# **HAMSTER-E** The small datalogger





The ELPRO dataloggers of the HAMSTER-E series are optimized for recording temperature and relative humidity. The data is stored in the datalogger's internal memory and can be loaded to the PC easy and quick via serial interface or USB. A small optical cable adapter is used for the data transfer. As a result, the communication interface is kept absolutely water-resistant.

### **HAMSTER-E ET1**



Part No. 4901 HAMSTER-E ET1



- Temperature recording with internal probe
- Measuring range: -40°C .. +70°C
- Alarm and status with LED in small window
- «Battery low» display
- Robust, shock resistant casing; easy to mount with lockable mounting bracket
- IP 67-sealed (dustproof, temporary submersion in water possible)
- Casing dimensions:64 x 93 x 27 mm

## **HAMSTER-E ET1-D**



Part No. 4904 HAMSTER-E ET1-D







- Temperature recording with internal probe
- Measuring range:-30°C .. +55°C
- Large 2 line display
- Alarm and values in display
- «Battery low» display
- Robust, shock resistant casing; easy to mount with lockable mounting bracket
- IP 65-sealed (dustproof, protection against water jets)
- Casing dimensions:64 x 93 x 27 mm

#### **HAMSTER-E ET2**



Part No. 4902 HAMSTER-E ET2





- Temperature recording with 2 external probes
- Measuring range:-90°C .. +260°C
- Temperature range for the datalogger: -30°C .. +55°C
- Principle of measurement:
   2-wire PT1000 in accordance
   with IEC751 / EN60751
- Large 2 line display
- Alarm and status in display
- «Battery low» display
- Robust, shock resistant casing; easy to mount with lockable mounting bracket
- IP 65-sealed (dustproof, protection against water jets)
- Casing dimensions:64 x 93 x 29 mm

## **HAMSTER-E EHT1**



Part No. 4903 HAMSTER-E EHT1









- Temperature and relative humidity recording
- Measuring range:
   Temperature: -30°C .. +55°C
   Relative humidity: 5% .. 95%
- Universal probe mounted at unit
- Large 2 line display
- Alarm and status in display
- «Battery low» display
- Robust, shock resistant casing; easy to mount with lockable mounting bracket
- IP 30-sealed (protected against solid foreign bodies 2.5 mm diameter)
- Casing dimensions:64 x 93 x 43 mm

#### **APPLICATIONS**



Monitoring food industry processes Using ELPRO datalogger systems as tools to document temperatures in HACCP processes.



Documenting transport conditions Logging temperatures during low-temperature and refrigerated transports.

#### Wide variety of applications:

- Transport of deep-frozen goods
- Warehouses, cold-storage warehouses
- Cold storage areas for fresh food products
- Display cases and store rooms for meat products
- Museums and galleries
- Technical processes
- Air-conditioned areas

#### TECHNICAL DATA

- Memory for 32'000 data points
- Small current consumption with typical battery lifetime of 2-3 years
- Batteries user replaceable
- Recording interval programmable from 10 s - 24 hrs
- Start/Stop and loop memory mode

#### **Measuring Range / Accuracy Temperature**

	Measuring Range	Resolution	Accuracy
ET1 (internal probe)	-40°C +70°C	0.2°C	± 0.5°C
ET1-D (internal probe)	-30°C +55°C	0.2°C	± 0.5°C
ET2 (ext. probe class B)	-50°C +100°C	0.2°C	± 0.5°C
	-90°C +260°C	0.2°C	± 1.0°C
EHT1 (int. universal probe)	-30°C +55°C	0.2°C	± 0.5°C

#### Measuring Range / Accuracy relative humidity

	Measuring Range	Resolution	Accuracy
EHT1 (int. universal probe)	5%rH 95%rH	0.2%rH	±3%rH

#### **TEMPERATURE PROBES**



Part No. 4960

PT1000 DIN A plug-on temperature probe, -30° .. +55°C, can be plugged directly to Hamster-ET2 logger



Part No. 4950-SLxx

PT1000 DIN A temperature probe; soft rubber, watertight, -90° .. +105°C, LS = 20 mm, D = 5 mm, cable length 3 m or 10 m



Part No. 4953-SLxx

PT1000 1/3 DIN B universal temperature probe, -50 $^{\circ}$  .. +180 $^{\circ}$ C, LS = 50 mm, D = 6 mm, silicone cable length 2 m or 10 m



Part No. 4951-SL04

PT1000 DIN A temperature probe,  $0^\circ$  .. 260°C, for dry applications only, LS = 50mm, D = 6mm, glass fiber cable length 4 m



Part No. 4952-SL03

PT1000 1/3 DIN B needle temperature probe, -50° .. +180°C, with handle, LS = 100mm, D = 4mm, silicone cable length 3 m



Part No. 4956-L0

PT1000 DIN A ML temperature probe, -90° ... +260°C, LS = 350 mm, D = 3mm, bendable, Tmax connector = 90°C, without cable

Part No. 4957-L0

PT1000 DIN A ML temperature probe, -90° .. +260°C, LS = 150mm, D = 3mm, bendable, Tmax connector = 90°C, without cable

#### **ACCESSORIES**



Part No. 4910 Wall bracket for the Hamster-E,lockable, including padlock



Part No. 4912 PC data cable for Hamster-E, for PC evaluation, RS232, DB9

#### Extension cables for 4956 / 4957

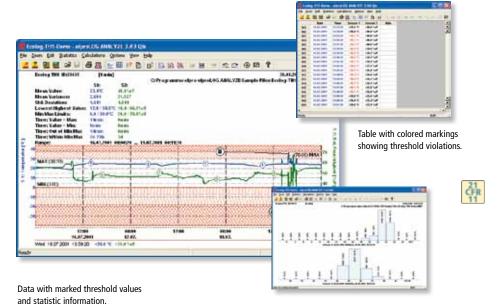
Part No. 4915-S02

Extension cable PT1000, 3-wire, L = 2m, connector M8x1 f/f, Tmax = 90°C
Part No. 4915-S05

Extension cable PT1000, 3-wire, L = 5m, connector M8x1 f/f, Tmax =  $90^{\circ}$ C

# elproLOG ANALYZE Software

The elproLOG ANALYZE software can be used for all ELPRO datalogger models, allowing fast and efficient evaluation of logged data. With elproLOG ANALYZE and a few mouse clicks, you can create meaningful and clearly laid out documentation of your climatic values in graph or table format. While observing regulatory compliance to FDA 21 CFR Part 11, GMP, GAMP 5, GLP and Annex 11, the validated elproLOG ANALYZE QLS software offers you all the security you need for monitoring your regulated environments.



Histogram with manual or automatic grouping.

#### **SERVICE & QUALITY**

- ISO 9001 quality system
- SCS calibration laboratory
- Vendor and internal audits
- Expert systems
- Own production and development
- Calibration according to all standards (ISO 17025)
- Customer calibration service
- Modern facilities
- Datalogger service since 1989
- Repair service
- IQ/OQ qualifications
- Temperature mapping service
- Worldwide distributors
- Return of ELPRO instruments and batteries for eco-friendly disposal

详细资料?请联系我们:sales@hkaco.com

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# HongKe

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#### **DIRECTIVES & STANDARDS**

#### ISO 9001: 2008

SGS certificate no. CH98/0013

SNCH 01 ATEX 3280/Directive 94/9/EC

#### EX1, CE1258

Approval for EX protection zone 1 (EN50014:1997 +A1 +A2,

## EN 50020:2002 and EN1127-1:1997)

## EN61000-6-2:2001 and EN61000-6-4:2001

# EN12830/EN13485/EN13486

## Temperature recorder for transport,

storage and distribution of foodstuffs

Exceptional approval for calibration GZ1480/2000 from 10.4.2000, BEV, Austria

## **INTEGRATED REGULATIONS** AND RECOMMENDATIONS

## GMP/GLP/GAMP 5

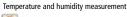
Software validation in accordance with 21 CFR Part 820, Electronic Records 21 CFR Part 11, 21 CFR Part 210/211. 21 CFR Part 110, 21 CFR Part 58

Regulation (EC) 37/2005 Directive 2002/95/EC (RoHS)

**Hazard Analysis Critical Control Points** 

#### **EXPLANATION OF ICONS**











21 CFR Part 11



