

- ELPRO Off-Site Service**
- Check-up
 - Repair
 - Calibration
 - Replacement



SERVICE DESCRIPTION

ELPRO Off-Site Service

Designed to Meet Your Expectations

ELPRO's Off-Site Service includes maintenance, repair and calibration of mobile data loggers and accessories at ELPRO's certified laboratory. Send us your monitoring equipment to prolong the service life of your investment and keep on track with your core business. This service is offered in addition to ELPRO's On-Site Service where an ELPRO technician installs, calibrates and maintains installations and equipment at the customer site.

Service Offer

Off-Site Service for Data Loggers

The following data loggers can be sent to ELPRO for Off-Site Service:

- ECOLOG
- ECOLOG-NET
- HAMSTER (Type ET1, ET1-D, ET2, EHT1)
- HOTBOX (HTN, HTH, SE)
- LIBERO (Type Tx1 and Cx)
- Non-ELPRO branded data loggers (not requiring software for calibration)



Equipment eligible for Off-Site Service is clearly defined.

Temporary Replacement Data Logger / Exchange Probes (Optional)

Do you need an ongoing recording of your data during Off-Site Service of your equipment? ELPRO offers Temporary Replacement Data Loggers and Exchange Probes so you can keep monitoring while your equipment is away for Off-Site Service. Order your required Temporary Replacement Data Logger or Exchange Probes in time before sending your equipment to ELPRO for Off-Site Service. After you have your equipment back, return the temporary equipment.

The following data loggers and probes are available as temporary replacements:

- ECOLOG TNx, TPx, TH1
- LIBERO Ti1, Ti1-L
- Exchange T/RH probe



Continuous monitoring and recording with a calibrated Temporary Replacement Data Logger / Exchange Probe. Calibration certificate (not older than 1 year) and return form are included in the delivery.

we prove it.

Check-up (Regular)

Each data logger sent to Off-Site Service will run through the Check-up process. Within Check-up ELPRO tests and verifies the functionality of your device. Optical inspection includes checking and cleaning of housing, existing interfaces / sockets (DB15, Lemo, RH, USB) and battery case. If foreseen for your device, ELPRO will exchange the battery, check the programming and readout functionality and update the battery exchange date. The age of the data logger will be determined and if available also the display and keyboard functionality are checked. External channels, internal probes and other accessories like brackets, external probes or data cables will go through electrical inspection. During the Check-up no calibration certificate is issued. Should you require a calibration certificate, please order the Calibration service for your device.



After the Check-up is completed, the customer has the assurance that the data logger is fully functional and correctly set. Where an exchange is possible, it also comes with a new battery.

Data Recovery (Optional)

In addition to Check-up, ELPRO offers a Data Recovery service which can be ordered separately. Data Recovery can involve specialist methods to read out existing data on the customer's data logger. If data can be recovered, an interpretation of the data is performed (what kind of data has been read out, are date and time stamps plausible, what data is trustworthy and from when on data might not be reliable anymore). In case of successful Data Recovery the customer receives the recovered data in electronic format.



Successful Data Recovery delivers the data in electronic format with a possible interpretation of the data. ELPRO cannot give a guarantee about the success of Data Recovery.

Repair (Optional)

Repair service takes care of your data logger should something happen to it.

ELPRO offers the following Repair services:

- For ECOLOG, types TN2, TN3-P, TN4, TN4-L, TH1, TH2, TP2 and TP4-L:
Repair of display, keyboard, quartz (clock), RH socket and Lemo socket
- For external probes: Replacement of connector and shorten cable in case of damaged cable or connector. The repair is concluded with an ice water test.



A successful repair delivers a once again usable data logger or accessory and comes with six months warranty. In case repair is not feasible ELPRO will make a special offer for a replacement data logger.

Calibration (Optional)

During Calibration service, the measurement of a test object is compared with a traceable reference. The accuracy is documented and confirmed in a calibration certificate. ELPRO's laboratories are certified for various measuring parameters and accredited to highest national standards (NIST, UKAS, SCS, etc.). ELPRO offers various standard and customized Calibration services. Those services differ in the process, the number and settings of calibration points and in the level of detail of the certificates. An excerpt of the calibration offering can be seen in the table on page 4.



Documented proof of accuracy with traceable calibration certificate to highest national standards.

Warranty and 8D Report (Optional)

A clarification regarding warranty and 8D Report (damage report) is available optionally. For all clarifications first the Check-up process is completed. In case that the equipment is under warranty, ELPRO does not charge for Check-up and will repair or replace the equipment free of charge. In other cases, ELPRO offers fair refunds and discounts for new devices, depending on age and general condition of your equipment.



Clear warranty conditions and customer friendly repair / replacement solutions, with a detailed 8D error report for your records.

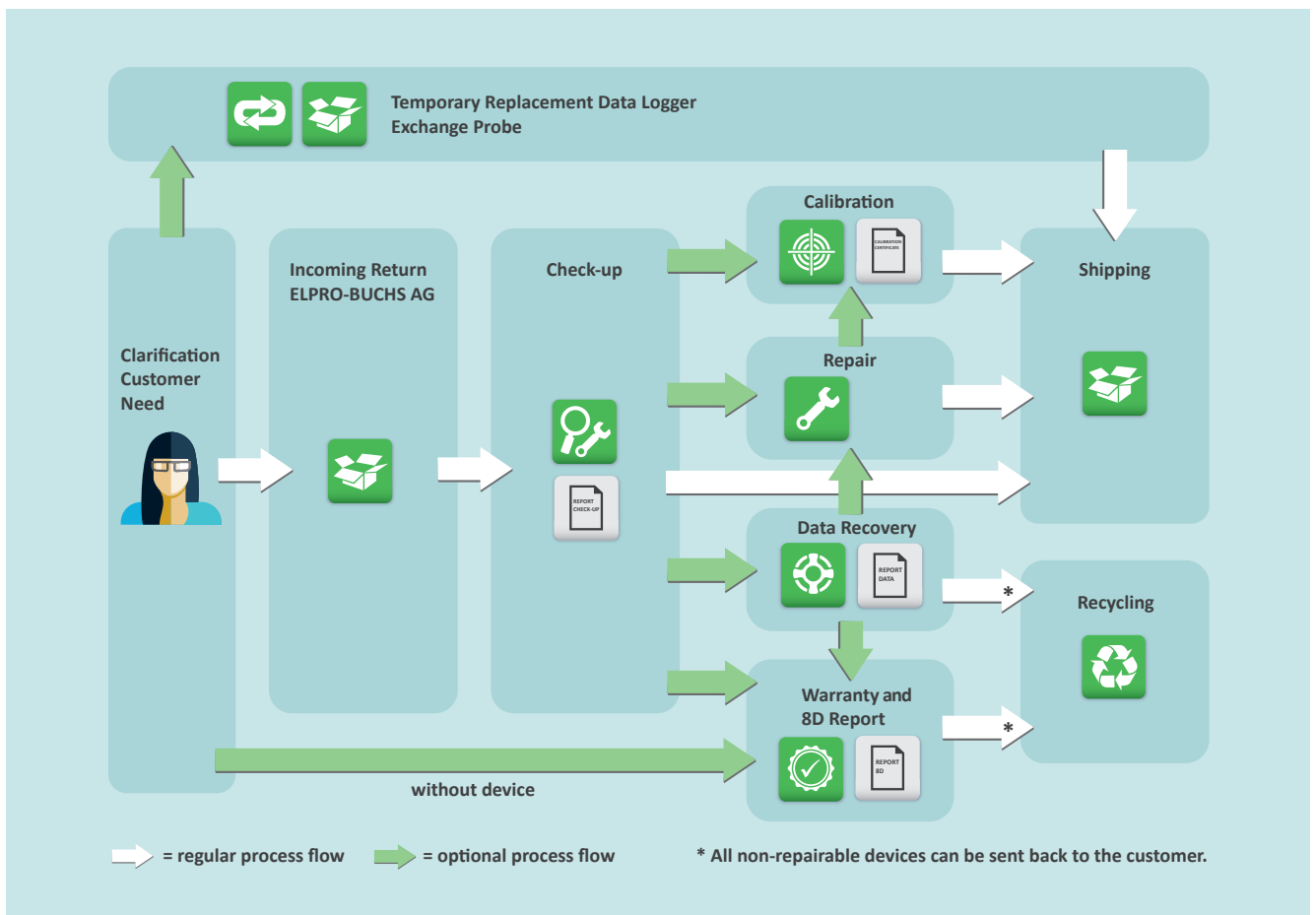
Recycling

Data loggers which cannot be used or repaired, will be professionally recycled. ELPRO believes in respecting our environment today and for future generations. Alternatively, we can send non-repairable equipment back to the customer.



ELPRO disposes of non-repairable data loggers responsibly so the material contained can be recycled.

ELPRO Off-Site Service Offering at a Glance



Peace of mind: Equipment sent to ELPRO for Off-Site Service is returned to the customer fit for use to deliver reliable data for your monitoring application!

Calibration Offering ELPRO-BUCHS AG

Type of probe	NTC internal	NTC external	Combined sensor T/RH
Device	ECOLOG TN2 TN3 LIBERO Ti1-x	ECOLOG TNx HOTBOX HTN SE LIBERO Te1-Nx/-U	ECOLOG THx HAMSTER EHT1 HOTBOX HTH LIBERO THi-x
Electrical calibration standard T and RH Test of all available channels with reference resistance. Certificate with tolerances for electrically calibrated data logger.	Not possible	T: -0.4 °C +73.3 °C	T: (only ECOLOG/HOTBOX) -0.4 °C +73.3 °C RH: (only ECOLOG/HOTBOX) 5 % RH 88.4 % RH
Factory calibration standard T and RH Comparison of test object with traceable reference. Certificate with tolerances for factory calibrated system (according to ELPRO standard).	T: 0 °C +40 °C	T: 0 °C +40 °C	T: 0 °C +40 °C RH: 35 %RH 80 %RH (bei 23 °C)
Factory calibration customized T and RH Comparison of test object with traceable reference. Certificate with tolerances for factory calibrated system (according to customer request).	T: Continuously -40 °C..+70 °C	T: Continuously -85 °C..+180 °C LIBERO: Continuously -85 °C..+85 °C	T: Continuously -40 °C..+150 °C RH: 0.5, 5, 10, 20, 35, 50, 65, 80, 95 %RH (bei 23 °C) RH as of 01.Mar.2015: Continuously 10 %RH..90 %RH (at +15 °C..+35 °C) 10 %RH..80 %RH (at +5 °C..+50 °C)
ISO 17025 calibration standard T and RH Comparison of test object with traceable reference according to ISO 17025/SCS-standards. Certificate with tolerances and measurement uncertainty for ISO 17025/SCS-calibrated system (according to ELPRO standard).	T: 0 °C +40 °C	T: 0 °C +40 °C	T: 0 °C +40 °C RH: 35 %RH 80 %RH (at 23 °C)
ISO 17025 calibration customized T and RH Comparison of test object with traceable reference according to ISO 17025/SCS-standards. Certificate with tolerances and measurement uncertainty for ISO 17025/SCS-calibrated system (according to customer request).	T: Continuously -40 °C..+70 °C	T: Continuously -85 °C..+150 °C LIBERO: Continuously -85 °C..+85 °C	T: Continuously -40 °C..+150 °C RH: 0.5, 5, 10, 20, 35, 50, 65, 80, 95 %RH (at 23 °C) RH as of 01.Mar.2015: Continuously 10 %RH..90 %RH (at +15 °C..+35 °C) 10 %RH..80 %RH (at +5 °C..+50 °C)

Type of probe	Pt100 external	Pt1000 int.	Pt1000 external	NTC, Pt100, Pt1000 – ext. and int.
Device	ECOLOG TPx LIBERO Te1-Px	HAMSTER ET1 ET1-D	HAMSTER ET2	Non-ELPRO branded data loggers
Electrical calibration standard T and RH Test of all available channels with reference resistance. Certificate with tolerances for electrically calibrated data logger.	T: -190 °C 0 °C +200 °C	Not possible	T: -90 °C 0 °C +80 °C	Not possible
Factory calibration standard T and RH Comparison of test object with traceable reference. Certificate with tolerances for factory calibrated system (according to ELPRO standard).	T: 0 °C +40 °C	T: 0 °C +40 °C	T: 0 °C +40 °C	T: 0 °C +40 °C
Factory calibration customized T and RH Comparison of test object with traceable reference. Certificate with tolerances for factory calibrated system (according to customer request).	T: Continuously -85 °C..+180 °C	T: Continuously -40 °C..+70 °C	T: Continuously -85 °C..+150 °C	T: Continuously -85 °C..+180 °C -196 °C RH: 0.5, 5, 10, 20, 35, 50, 65, 80, 95 %RH (at 23 °C) RH as of 01.Mar.2015: Continuously 10 %RH..90 %RH (at +15 °C..+35 °C) 10 %RH..80 %RH (at +5 °C..+50 °C)
ISO 17025 calibration standard T and RH Comparison of test object with traceable reference according to ISO 17025/SCS-standards. Certificate with tolerances and measurement uncertainty for ISO 17025/SCS-calibrated system (according to ELPRO standard).	T: 0 °C +40 °C	T: 0 °C +40 °C	T: 0 °C +40 °C	T: 0 °C +40 °C
ISO 17025 calibration customized T and RH Comparison of test object with traceable reference according to ISO 17025/SCS-standards. Certificate with tolerances and measurement uncertainty for ISO 17025/SCS-calibrated system (according to customer request).	T: Continuously -85 °C..+150 °C and -196 °C	T: Continuously -40 °C..+70 °C	T: Continuously -85 °C..+150 °C	T: Continuously -85 °C..+150 °C -196 °C RH: 0.5, 5, 10, 20, 35, 50, 65, 80, 95 %RH (at 23 °C) RH as of 01.Mar.2015: Continuously 10 %RH..90 %RH (at +15 °C..+35 °C) 10 %RH..80 %RH (at +5 °C..+50 °C)