

Battery Box 10

Power supply for battery operated alarm devices



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1 General information about the manual

This manual is an integral part of the product.

- Please read the manual before using the product.
- Keep the manual available for the entire duration of the product's life span.
- Provide the manual to the next owner or user of the product.
- Please report any errors or discrepancies related to this manual before commissioning the device.

1.1 Markings and symbols

Safety-related markings and symbols



This marking warns of a fault or hazardous situation. Failing to observe the safety instructions in question may result in injury or device breakage.

Informative markings and symbols



This marking highlights essential information.

1.2 Conformity of the product

The EU declaration of conformity and the product's technical specifications are integral parts of this document.

All of our products have been designed and manufactured with due consideration to the essential European standards, statutes and regulations.

Labkotec Oy has a certified ISO 9001 quality management system and ISO 14001 environmental management system.

1.3 Limitation of liability

Due to continuous product development, we reserve the right to change these operating instructions.

The manufacturer cannot be held liable for direct or indirect damage caused by neglecting the instructions provided in this manual or directives, standards, laws and regulations regarding the installation location.

The copyrights to this manual are owned by Labkotec Oy.

2 Safety and the environment

2.1 General safety instructions

The plant owner is responsible for the planning, installation, commissioning, operation, maintenance and disassembly at the location.

Installation and commissioning of the device may be performed by a trained professional only.

Protection of operating personnel and the system is not ensured if the product is not used in accordance with its intended purpose.

Laws and regulations applicable to the usage or the intended purpose must be observed. The device has been approved for the intended purpose of use only. Neglecting these instructions will void any warranty and absolve the manufacturer from any liability.

2.2 Intended use

Battery Box 10 is a battery powered power supply unit with an output voltage of 15 VDC (depends on the condition of the batteries).

A more specific description of the product's operation, installation and use is provided later in this manual.

The device must be used in accordance with the instructions provided in this document. Other use is counter to the product's purpose of use. Labkotec cannot be held liable for any damage caused by using the device in violation of its purpose of use.

2.3 Transport and storage

Check the packaging and its content for any possible damage.

Ensure that you have received all the ordered products and that they are as intended.

Keep the original package. Always store and transport the device in the original packaging.

Store the device in a clean and dry space. Observe the permitted storage temperatures. If the storage temperatures have not been presented separately, the products must be stored in conditions that are within the operating temperature range.

2.4 Repair

The device may not be repaired or modified without the manufacturer's permission. If the device exhibits a fault, it must be delivered to the manufacturer and replaced with a new device or one repaired by the manufacturer.

2.5 Decommissioning and disposal

The device must be decommissioned and disposed of in compliance with local laws and regulations.

3 Product description

3.1 General

Battery Box 10 is a DC power supply unit for DC devices with an output voltage of 15 VDC (depends on the condition of the batteries). 10 pieces of 1.5 V batteries (type C, LR14 or AM-2 JIS) should be installed in the unit. Batteries are not included.

This installation and user guide contains instructions for the installation, commissioning, and use of the unit.

3.2 Safety



Battery Box 10 includes an automatic fuse. In the event of a short circuit or overload, the fuse protects the batteries from destruction. If the fault is no longer present, the fuse returns to normal status.

Leaking battery acid can cause personal injury and damage to the device.



- Never use batteries that are leaking
- Never use batteries with external damage such as dents or deep scratches, even if no battery acid is leaking

Overheated batteries can cause malfunctions or damage to the device



- Always operate batteries in the temperature range specified by the manufacturer. The typical maximum ambient temperature for normal LR14 batteries is 45 °C and for the LR14 heavy-duty version 55 °C.

4 Installation

4.1 Installing the enclosure

Battery Box 10 is wall mounted. Installation holes are located at the bottom part of the box under the mounting holes for the cover.

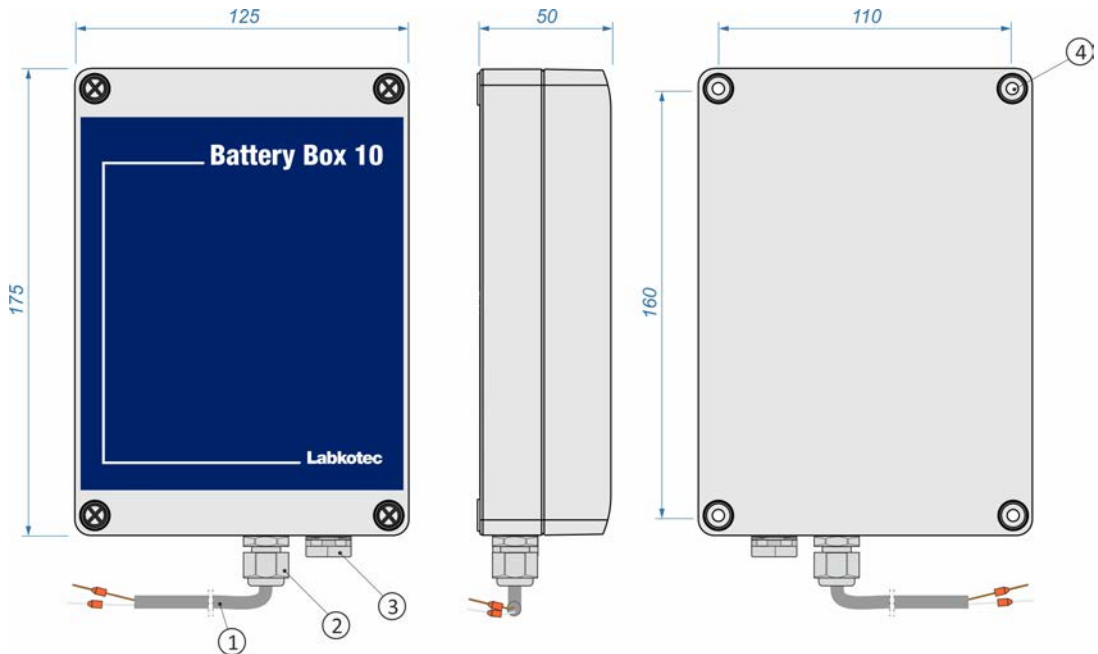


Figure 1 . Battery Box 10 dimensions (mm)

- 1 Cable LIYY 2 x 0.5 mm² (brown -, white +)
- 2 Cable gland M12 for cable diameter 3-6.5 mm
- 3 Ventilator IP68
- 4 Fastening holes Ø4.5 mm, 4kpl, installation dimensions 110 x 160 mm

4.2 Installing batteries

Permitted battery types:

- Type LR14 IEC (International Electrotechnical Commission)
- Type C ANSI (American National Standards Institute)
- Type AM-2 JIS (Japan Industrial Standard)

When installing batteries, the Battery Box 10 supply cable must not be connected to the input device.

Install 10 pcs of batteries inside the battery holder. Ensure that the battery poles are in connection to each other and to the connection areas on the sides so that there are no breaks in the circuit (see figure 2). Close the enclosure cover. Connect power supply cable of enclosure to the input device.



Figure 2 . Battery Box 10 installing batteries

4.3 Changing batteries

1. Disconnect the power supply cable from the input device or from Battery Box 10 (see figure 2).
2. Open the lid of enclosure.
3. Remove the old used batteries.
4. Insert the new batteries. Ensure that the battery poles are in connection to each other and to the connection areas on the sides so that there are no breaks in the circuit (see figure 2).
5. Close the lid of enclosure.
6. Connect the power supply cable to the input device or to Battery Box 10.

4.4 Tips for battery operation

The service life of batteries depends on factors such as consumption, battery quality and type, age and storage.

To achieve the longest possible service life of operating with batteries:

- always select quality batteries.
- always select batteries with the highest possible capacity (mAh).
- always use new batteries when changing because batteries lose capacity during long periods of storage.
- always use batteries of the same type and make.
- never mix new and old batteries.

5 Technical specifications


Battery Box 10	
Dimensions	125 x 175 x 50 mm (w x h x d)
Enclosure	IP 65, material polycarbonate
Gable glands	1 pcs M12 for cable diameter 3-6.5 mm
Weight	470 g (without batteries) 1130 g (with batteries)
Operating environment	-10 °C...+45-55 °C (Max. temperature depends on battery type) Max. elevation above sea level 3,000 m Relative humidity RH 100% Suitable for indoor and outdoor use (protected from direct rain)
Output operating voltage	15 VDC (depends on the condition of the batteries) The internal fuse cannot be replaced.
Batteries	10 x 1.5 V DC (type C, LR14 or AM-2 JIS) Batteries are not included.
Manufacturing year: Please see the serial number on the type plate.	xxxxxxx x xxx xx YY x where YY = manufacturing year (e.g. 18 = 2018)

6 Appendix EU Declaration of Conformity



EU DECLARATION OF CONFORMITY

We hereby declare that the product named below has been designed to comply with the relevant requirements of the referenced directives and standards.

Product	Battery Box 10
Manufacturer	Labkotec Oy Myllyhaantie 6 FI-33960 Pirkkala Finland
Directives	The product is in accordance with the following EU Directives: 2014/30/EU Electromagnetic Compatibility Directive (EMC) 2014/35/EU Low Voltage Directive (LVD) 2011/65/EU Restriction of Hazardous Substances Directive (RoHS)
Standards	The following standards were applied: EMC: EN IEC 61000-6-2:2019 EN IEC 61000-6-3:2021 EN IEC 61000-3-2:2019 EN 61000-3-3:2013/A1:2019 LVD: EN 61010-1:2010/A1:2019/AC:2019-04 RoHS: EN IEC 63000:2018 The product is CE-marked since 2018.
Signature	This declaration of conformity is issued under the sole responsibility of the manufacturer. Signed for and on behalf of Labkotec Oy. Pirkkala 10.8.2021  Janne Uusinoka, CEO Labkotec Oy