LOXXER







LITHIUM BATTERY STORAGE



THE LOX12 HOW DOES THE CABINET WORK?

The LOX12 locker cabinet is designed for the safe storage and charging of lithium-ion batteries from bicycles and scooters. It is also the ideal solution for companies where employees are responsible for their own equipment, such as scanners, walkie-talkies and power tools. The cabinet consists of twelve individual lockers, each secured with a numeric combination lock, providing a safe and controlled charging environment.

FEATURES



ACTIVE VENTILATION

To prevent heat build-up during the charging process, the cabinet uses active ventilation. Warm air is extracted at the top, while fresh air is drawn in at the bottom. This ensures a stable internal climate. When connected, the cabinet can exhaust air safely into an external ventilation system.



12 LOCKERS

The cabinet consists of 12 individual lockers. Each locker can be locked separately using a numeric combination lock, available in both public and private mode, and is provided with a master code, allowing users to safely store and charge their own batteries or equipment.



2 SOCKETS PER LOCKER

Each locker is equipped with two power sockets, making it possible to charge two lithium-ion batteries simultaneously within the same locker.



MONITORING

A built-in controller continuously monitors all critical components: smoke & temperature detectors, ventilation fan, siren & status LED, optional aerosol unit, optional wireless module (M2M)
If any component fails, the system triggers a fault notification.



WHAT HAPPENS DURING A BATTERY FIRE?

HOW DOES THE CABINET DETECT?

To avoid false alarms, the cabinet uses 2 different types of detection:

- Smoke detection
- Temperature detection

WHY 2 TYPES OF DETECTION?

A standard optical smoke detector can sometimes react to things that are not a fire, such as cigarette smoke, dust or vapour. That is why the cabinet does not rely on a single signal. Only when smoke and an abnormal temperature increase are detected together, the system considers this a real fire risk. This ensures reliable detection and prevents unnecessary interruptions.

WHAT HAPPENS WHEN THERE IS TEMPERATURE OR SMOKE DETECTION?

ALARM

A pre-alrm is triggered when one of the two detections occurs, smoke or temperature (>60°C)

The system immediately:

- Stops all charging
- Shuts down ventilation

Gives notifaction by

- ... a pulsing siren
- turning the status LED purple

Sends a signal that can be forwarded to:

- fire alarm panel
- or via M2M communication (optional)

This is an early warning, allowing quick action before the situation escalates.



PRE-ALARM

An alarm is triggered when both detections occurs, smoke and temperature.

The cabinet will take maximum safety actions:

- Charging stops instantly
- Ventilation remains shut down
- The status LED turns red
- The siren sounds continuously
- The aerosol fire suppression unit activates (if the option is installed)

Gives notifaction by

- ... a pulsing siren
- turning the status LED purple

Sends a signal that can be forwarded to:

- fire alarm panel
- or via M2M communication (optional)

Doors must not be opened, except by trained emergency personnel.



HOW DO YOU GET NOTIFIED?

Every cabinet includes:

- a high-intensity siren
- a flashing indicator
- RGB status LED

These alerts ensure immediate recognition by nearby personnel.

HOW DO YOU GET NOTIFIED IF THERE IS A FIRE UNATTENDED OR AT NIGHT?

The cabinet is supplied with a **connection that allows the cabinet to be linked to the building's fire alarm** control panel. This enables fire or fault signals to be transmitted directly to the existing fire alarm system.

If you also wish to receive **notifications on your smartphone**, an M2M module can be selected as an optional feature. This module allows push notifications to be sent in the event of alarms or relevant status changes, independent of the building system.



M2M

The LOX12 can be equipped with a smart M2M module, ensuring you are always aware of what is happening inside the cabinet. Thanks to the connection with multiple networks, you receive reliable notifications and can easily monitor the status.



AEROSOL FIRE SUPPRESSION SYSTEM

The cabinet can optionally be equipped with an integrated aerosol fire suppression unit.
This technology is specifically designed to control and suppress battery fires and provides an additional layer of protection.
The cabinet itself has been tested and VDMA-certified without the use of aerosol fire suppression, meaning that compliance with safety requirements is achieved by the cabinet's design alone. The aerosol system therefore serves as an extra safeguard.

WHAT IS AEROSOL FIRE SUPPRESSION?

When activated, the unit releases a fine aerosol inside the cabinet.
This aerosol:

- Interrupts the fire process
- Suppresses the chemical reaction of combustion
- Helps prevent further escalation
- The aerosol will fill up the cabinet

This happens without water, avoiding additional damage to batteries and electronic components.

WHEN IS THE AEROSOL ACTIVATED?

- Only during a full alarm
- When both smoke and rising temperature are detected
- Fully automatic, without human intervention

Aerosol fire suppression provides a critical extra safety layer, on top of detection, alarms and containment.

