



Reliable Battery Monitoring

Protect human life, increase safety and prevent damage

MOBOTIX protection for sensitive areas

- Battery Production & Assembly in Industry
- Power Generation & Supply
- Lithium-ion Buffers (e.g. Battery Packs)
- Storage & Logistics (Racks/Trucks)
- Stationary and Virtual Power Plants (Industry and Private)
- E-Charging Stations & Wall Boxes (E-mobility)
- Recycling and Waste Disposal



MOBOTIX
Beyond Human Vision

Fire Protection & Batteries

New technology creates new challenges & opportunities

Lithium-ion batteries have increased in industry and private households, especially concerning renewable energy and e-mobility. The use and storage of battery technology are challenging for companies from production, logistics and recycling, especially in fire risk and extinguishing processes.

Various risks in the life cycle of batteries

- **High discharge**
- **Overcharging and overheating**
- **Incorrect/defective chargers**
- **Damage (due to temperature fluctuations, transport, production errors, physical impact)**

Saving lives & assets with fast action

A particular risk of battery fires is the „thermal runaway.“ A chain reaction takes less than 60 seconds from start to explosion. **Rapid fire detection is essential.** MOBOTIX solutions can be tailored to your on-site requirements. MOBOTIX battery monitoring systems can reliably save values and lives.

MOBOTIX Benefits

- ✓ **Pre detection of fire**
- ✓ **Locate and isolate damaged or burning batteries fast**
- ✓ **Alarm activation to inform and act**
- ✓ **SCADA systems integration**
- ✓ **24/7 reliable battery monitoring**
- ✓ **Automate emergency measures**
- ✓ **Temperature data monitoring**
- ✓ **Emissivity per detection window (different surfaces)**



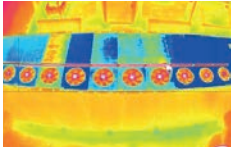
MOBOTIX S74/S74 Thermal
Four Flexible Modules Combined
in a Single Camera



MOBOTIX M73/M73 Thermal
3 Modules - Compact and Powerful
in One Housing

A Task for MOBOTIX Thermal Technology

Protection of numerous industries and application areas



Industry and Energy Generators (Energy Buffer)

In many industrial areas and energy generators, such as solar farms, wind farms, and wherever energy peaks are present, the **accumulated capacity of grouped batteries is used as an energy buffer**. These need reliable protection as enormous damage occurs in the event of a fire. Professional battery monitoring pays directly into ROI.



Industry (Production)

If batteries are produced or assembled in the industry (e.g., e-vehicles), you want to **detect anomalies as early as possible** to isolate the batteries from the production process.



Warehouses

Often thousands of battery cells are stored in warehouses. In an incident, this means several million euros in damages and liability. If the danger is recognized quickly, an **automatic forklift for klift truck**, for example, **can remove defective batteries from the storage position** and move them to explosion-proof areas.



Logistics

When transporting batteries or e-vehicles (transfer), on trucks and trains, or car ferries, **mobile variants of the MOBOTIX solution** can monitor the entire transport process.



Underground garages, parking garages and private garages

Here, **security for wall boxes** (typically 20-kW battery for residential buildings) plays an essential role. In some countries, the law requires an early warning system. In danger, the system can trigger an alarm, extinguish systems, or send messages.



E-filling Stations

At e-fueling stations, improper handling can lead to incidents. In addition to **securing charging operations using thermal technology**, other optical video analysis applications can **increase utilization and safety at e-fueling stations**.



Disposal and Recycling

Damaged lithium-ion batteries are a recurring fire risk in waste disposal and recycling – especially when batteries are disposed of improperly and unrecognized in unspecified waste.



Certified MOBOTIX Early Fire Detection:

Some MOBOTIX thermal cameras are officially certified as premium fire protection solutions. – e.g., by the **European standard EN 54-10** (Declaration of Performance) for flame detectors or by Europe's largest institute for corporate security, **VdS Schadenverhütung GmbH**. The specified, intensive tests proved the suitability of the MOBOTIX systems.



MOBOTIX S74 Thermal

Flexible MOBOTIX thermal camera. The modules (CIF or VGA) are flexibly connected to the concealed camera housing with **cables over 30 meters in length**. This allows both special installations as well as efficient surveillance of several areas with just one camera.

MOBOTIX Video Systems — Robust, Efficient and Versatile

MOBOTIX offers industrial quality that is dust- and dirt-resistant. MOBOTIX video systems are robust and weather-resistant. They can withstand ambient temperatures ranging from -30°C to +60°C. The maintenance-free housing provides protection against humidity and corrosion.

The versatile systems stand out thanks to their reduced power consumption, bandwidth-optimized applications and system stability. This allows MOBOTIX to achieve measurable return on investment (e.g. through system downtimes, insurance sums in the event of damage, etc.).

Intelligent Video Security Solutions Made in Germany

MOBOTIX offers a comprehensive range of solutions for all aspects of video-based security. We develop high-quality, decentralized, energy-efficient systems that save our customers money.

Our motto **BeyondHumanVision** is also our mission: MOBOTIX is fully committed to making itself the most reliable company it can be, one that protects people and property by using intelligent, cyber-secure video technology to go beyond human vision.

MOBOTIX video systems feature powerful, high-quality components. Made in Germany. Assembled and put through their paces at our production site in Langmeil. Even in poor lighting conditions, our video systems deliver outstanding image quality for every application in a wide range of industries. You can depend on us!



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Talk to us.
We are happy to help you.

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