

Everything back on board? – RFID technology helps fire departments manage equipment and resources

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Large-scale operation. There's a fire. Every second counts! The fire brigade moves out. Thanks to well-rehearsed processes and modern equipment, lives can be saved and major damage prevented.

But despite training and routine, such an operation means stress for the firefighters - but also for the equipment used.



Hoses, breathing apparatus, cutting tools or hydraulic rescue kits must be

cleaned, tested, maintained and made ready again after use. Equally important is the question of whether all equipment has actually arrived back on the right vehicle or at its intended storage location.

This is important because only fully equipped vehicles can be deployed immediately and without restrictions in the next operation.

Between operational readiness and documentation effort

The inspection of equipment and resources is part of the everyday life of fire departments. At the same time, the requirements for documentation and traceability are increasing. Many of these processes are still carried out manually or require numerous steps.

This raises the question: How can you reliably check whether all equipment is on board? And how can it be documented when a device was last checked, cleaned or serviced?

RFID creates transparency over the entire life cycle

For efficient management of equipment on the fire truck, but also in the area of warehousing and logistics as well as maintenance activities, FEIG offers suitable UHF RFID readers for the identification and management of firefighting equipment. For this purpose, equipment is fitted with robust, maintenance-free UHF RFID transponders. This gives each object a unique digital identity and can be reliably identified throughout its entire life cycle. Whether hoses, breathing apparatus, hydraulic rescue tools, cutters or other equipment: all marked equipment can be automatically recorded and documented.

Automatic completeness check directly in the vehicle

In combination with stationary UHF RFID readers such as the FEIG LRU4000X and the UHF RFID LOCFIELD® antenna, the equipment can be automatically detected directly in the fire truck.

The system automatically detects which items are present and whether the intended load is complete. Missing equipment can be detected immediately and reported to the staff. This simplifies completeness control and reduces the risk of unnoticed missing of required equipment.

Digital support for maintenance and repair

Maintenance and cleaning processes can also be efficiently supported by RFID technology. Since each piece of equipment is uniquely identifiable, work carried out can be directly assigned to the respective object and digitally documented.

RFID transponders can be quickly scanned using mobile readers such as the FEIG ID ECCO+. Its simple integration as a Bluetooth keyboard into existing applications and software solutions makes it easier to digitize existing processes without having to fundamentally change established workflows.

Proven technology for firefighting operations

RFID-based solutions for the management of equipment and resources are no longer a vision of the future. Numerous providers have established such systems in the market, and RFID technology is already being used in a wide variety of areas within logistics, maintenance, and inventory management. With its UHF RFID readers, FEIG has been supporting applications for many years where transparency, availability, and the reliable identification of objects are key — including in the firefighting and rescue sectors.

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This allows emergency responders to spend less time searching for and documenting equipment and to focus on what really matters in an emergency: helping people.

About FEIG

FEIG ELECTRONIC is a market and innovation leader for intelligent electronic system solutions in numerous market areas. FEIG develops and produces innovative RFID and identification technologies for applications in railway, logistics, healthcare, libraries, as well as access control. In addition, FEIG offers the cVEND family of unattended payment terminals for use in public transport, EV charging, vending and parking applications. FEIG technologies help organizations worldwide improve security, transparency and process efficiency.

For more information, please visit: www.feig.de/en