



# ConneXion

## Safety Sensors

ConneXion is a monitoring system for fire extinguishers and other safety equipment. The system enables continuous monitoring of operation and functionality. Any deviations are immediately reported via email or push notification.

The system operates independently and is monitored as standard through a cloud service connected to mobile and web applications.

Usage, fault alarms, and test results are logged and easily compiled, which can be utilized for resource planning and evaluation of future needs.

The system can also be connected to Systematic Fire Safety Management systems, property management systems, or other safety and monitoring systems. The system can be connected to fire extinguishers, emergency lighting, smoke vents, and similar safety equipment.

### Fire Extinguishers – Connected 24/7

The sensor for fire extinguishers is integrated into the wall bracket. It checks all critical functions of the fire extinguisher several times per day, for example:

- Low pressure
- Used extinguisher
- Blocked fire extinguisher
- Missing safety pin or absence of another essential component
- Temperature in the protected area

The sensor performs self-checks and continuously measures signal strength and battery status, reporting any faults. Battery life is 10 years. A fault alarm is generated when the battery level is low or the battery has expired.

The sensor is equipped with a buzzer and LED indicators. There is also the option to activate an alarm function that warns if the fire extinguisher is stolen or moved.

The sensor works with all brands and models of fire extinguishers.

### Emergency Lighting – Connected 24/7

Exit signs and other emergency lighting systems must enable evacuation during accidents or power failures. Emergency lighting, like fire extinguishers, must be regularly inspected. With ConneXion, all critical functions are continuously monitored, such as:

- Broken light source
- Faulty or expired battery
- Power supply failure (230 VAC)
- Faulty internal electronics

The sensor copies the emergency light fixture's own fault codes and forwards them to ConneXion. The system is adapted for all Dafo standard fixtures and can easily be customized for other fixtures or equipment that indicates functionality via LED.



The battery voltage and internal temperature is also monitored, enabling indication of degradation in electronics and batteries.

## Smoke Vents – Connected 24/7

Smoke vents are designed to ventilate smoke gases in the event of a fire to facilitate evacuation and firefighting operations. If detectors or holding magnets fail, vents may open unintentionally, which can result in risks such as water damage or burglary.



The smoke vent sensor enables immediate notification when smoke vents open by detecting changes in angle. The sensor also measures temperature and humidity, which simplifies investigations if a vent experiences recurring faults.

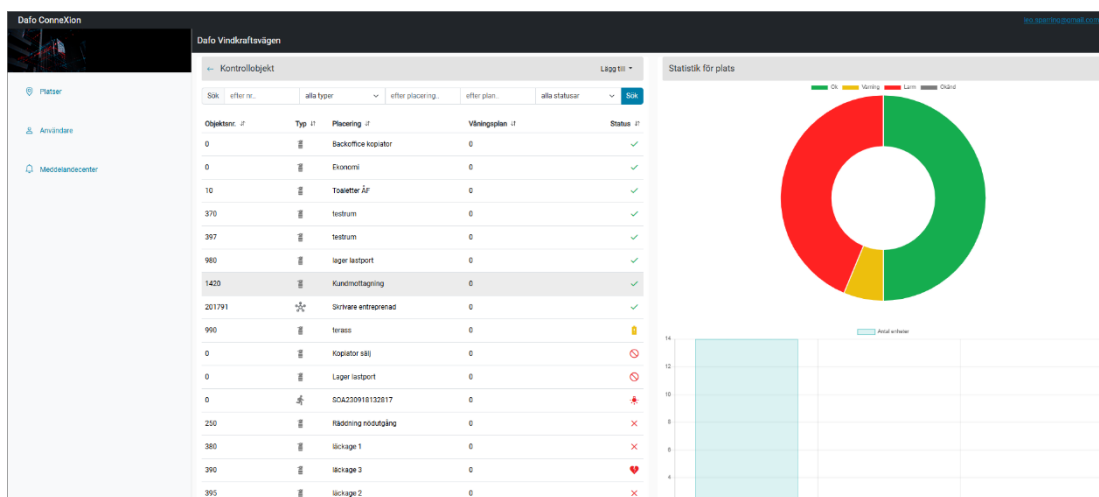
Installation is simple using two screws in the vent frame. Battery life is 5–8 years, and a fault alarm is generated when the battery level is low.

## Wireless Connection via Mobile Network

The sensors are connected to the cloud service through a gateway/hub connected to the mobile network via eSIM (NB-IoT). This means the network can remain completely separate from the rest of the organization's infrastructure.

Alternatively, the building's Wi-Fi or wired connection can be used, or a fully local solution with internal data storage can be implemented.

All fire extinguishers, emergency lights, and other safety equipment are wirelessly connected, enabling easy installation. The connection has a range of up to 350 meters depending on the building design. Signal repeaters can be connected if necessary.



The web application allows monitoring of devices and management of user permissions and notifications.

## Technical Data

Fire Extinguisher Sensor	
Sensor type	Weight Optical Temperature Tamper
Radio frequency	868 MHz
Wireless range	Up to 350 m
NFC connection to mobile	Range 5 cm
Light indication	3 LEDs, green and red
Sound indication	Piezoelectric buzzer 70 dB
Battery type	3-6 pcs AA 1.5 V
Battery life	10 years
Temperature range	5-25° C
Protection class	IP20
Dimensions diameter×depth	ø96×136 mm
Weight	620 grams
Approvals	RoHS, CE
Article no.	18-0190-10

Smoke Vent Sensor	
Sensor type	Angle Temperature Humidity
Radio frequency	868 MHz
Wireless range	Up to 350 m
NFC connection to mobile	Range 5 cm
Battery type	CR2477N 3.0 V
Battery life	5-8 years
Temperature range	-30-75° C
Protection class	IP65
Length × width × depth	115×60×35 mm
Weight	80 g
Approvals	RoHS, CE
Article no.	18-0190-30

Emergency Lighting Sensor	
Sensor type	Light sensor - Copies self-test Battery Temperature
Radio frequency	868 MHz
Wireless range	Up to 350 m
NFC connection to mobile	Range 5 cm
Battery	Uses the fixture's battery
Temperature range	-10-50° C
Adapted for emergency lighting	Linus (16-7280-01), Pelux (16-7280-10), Aluxa (16-7280-35)
Approvals	RoHS, CE
Article no.	18-0190-50

## Easy Installation and Support for Fire Safety Management

Operating status and alarm indications are registered and stored in a cloud-based database, where users and permissions are also managed. Users are primarily notified via email or push notifications configured through the web application or mobile app, alternatively through another safety system.

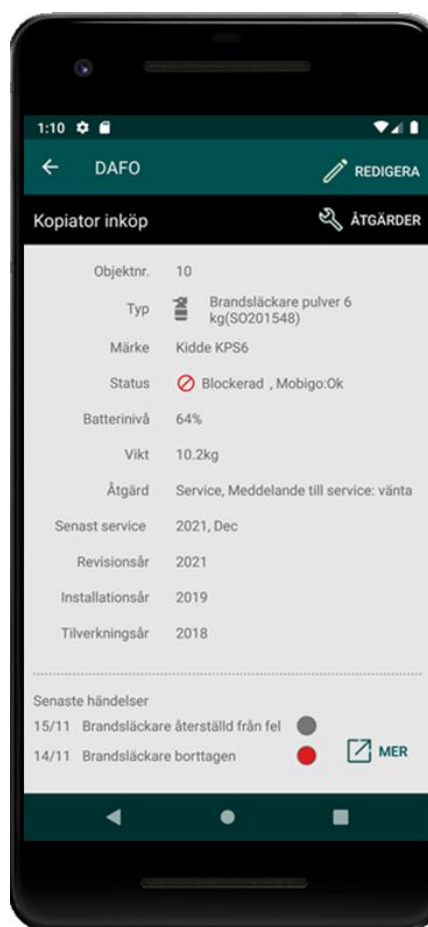
The sensors are easily installed by the user or a service technician. Connection and commissioning to ConneXion are then performed using the mobile app by scanning the NFC chip with a smartphone.

The system provides excellent support for systematic fire safety management (SBA). Through the mobile app, users can easily perform self-inspections and read operational status and any deficiencies.

If the system is connected to, or functions as, a service register, information is provided regarding installation and inspection year as well as the date for the next workshop inspection and recharge.

The system can also be connected to other maintenance and service systems and integrated with a property management system.

## Mobile App



The mobile app can be downloaded free of charge and works on both Android and iPhone devices.