

# EV-CAR SAFE

**CERTIFIED FIRE DETECTION AND SUPPRESSION  
FOR ELECTRIC VEHICLE PARKING AREAS**



**EV-Car Safe is a compact, fixed fire protection system designed for electric vehicle parking spaces. It combines thermal detection with targeted water discharge beneath the vehicle battery to rapidly control heat release, limit fire spread, and protect nearby vehicles and infrastructure.**



**EV-CAR SAFE - Certified fire protection system. Third party tested in live full scale thermal run-away scenarios...**

## DESIGNED TO PROTECT

EV-CAR SAFE is an innovative solution designed to protect electric vehicles from fire. It is an all-in-one thermal detection and fire suppression device specifically designed for EV parking spaces.

Key features

- Compact fixed unit installed directly in each EV parking space or charging point.
- Integrated thermal detection with targeted water discharge.
- Automatically activates when a preset temperature threshold is reached.
- Releases water through nozzles to cool the underside of the vehicle where batteries are located.
- Helps prevent fire spread and significantly reduces smoke generation.
- Provides fast, reliable, and effective protection for EV parking environments.

The system continuously monitors temperature and, when activated, opens the water valve to direct cooling water beneath the vehicle's battery area, helping to control thermal events before they escalate.

## DESIGNED TO RESPOND

Key operational features

- Integrated thermal detection continuously monitors temperature beneath the vehicle and automatically sends alerts when abnormal heat levels are detected.
- Compatible with Building Management Systems (BMS) and fire alarm systems, enabling seamless monitoring, alarm signalling, and coordinated emergency response.
- Optional remote communication activates camera monitoring, allowing operators to visually assess the vehicle and react immediately.
- Installed directly beneath the EV battery area, delivering rapid targeted water discharge to control heat release and reduce the risk of tyre ignition.
- Tridimensional diffuser nozzles provide wide-area protection for the vehicle, while also helping shield neighbouring vehicles and surrounding structures.
- Built with Fire Fighter safety in mind.





## WHERE TO INSTALL EV-CAR SAFE?

Easily integrates with your existing infrastructure—no major construction required.

- Can be connected to your current water supply (domestic network, Hose reel supply, hydrants, sprinklers, etc.).
- Requires only a maximum flow of 100 lpm at 5 bar pressure, just like a standard hose reel.
- Stand Alone option: allows fire-fighters to connect from a remote point and activate the system from a safe distance.
- Easy installation. Light weight. 15kg.

### Perfect for:

- Parking spots and charging stations.
- Electric vehicle charging hubs, car dealerships.
- Ferries, EV Freight vessels
- Underground car parks
- Residential and Commercial Parking



## KEY BENEFITS

- Immediate containment during the early stages of a fire.
- Enables rapid alerts so action can be taken quickly, preventing irreversible damage.
- Battery cooling to stop fire development and minimize consequences.
- Controls heat and reduces fire intensity to prevent it from spreading to other vehicles or structural elements.
- Supports safe evacuation and protects lives.
- Assists fire-fighters, improving intervention situation and lowering direct exposure to hazards.
- Certified system, real-world tested with 100% electric vehicle fire scenarios.

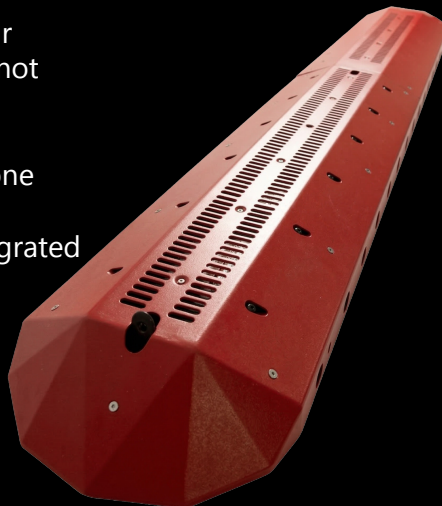
## AVAILABLE IN MULTIPLE VERSIONS

### Stand Alone Model.

Features discharge nozzles and a linear heat-sensing cable. Discharge button not included.

### Model with Control Unit in Cabinet

Offers all the benefits of the Stand Alone model, plus a wall-mounted cabinet with integrated control unit.



### Model with Pedestal

Includes all Stand Alone model features, plus a pedestal with activation button.

### Detector Model

Equipped with a linear heat-sensitive detection cable. Does not include discharge button or water release system.



# COMPLEMENTARY CERTIFIED THERMAL RUN-AWAY PROTECTION MEASURES

## EQUINOX FIXED & PORTABLE LI-ION BATTERY FIRE SUPPRESSION SOLUTIONS

POWERED BY COLD FIRE.



### How Cold Fire® Works

Cold Fire® is a PFAS free water additive that acts on two fronts simultaneously to kill fires that water alone cannot touch:

1. **Rapid Cooling** (The Heat Thief): Cold Fire has an extraordinary capacity to absorb heat. It cools surfaces 21 times faster than water, removing the energy required for the fire to sustain itself. This is critical for lithium-ion thermal runaway.
2. **Encapsulation** (The Fuel Lock): The agent creates a molecular "cocoon" around the fuel source—encapsulating hydrocarbons and electrolyte vapours to prevent re-ignition.



### EQUINOX SPRINKLER

EQUINOX Sprinklers are certified to completely suppress a fully developed EV Car fire preventing car to car spread and car to structure heat transfer with zero reignition.

### EQUINOX-HOSE REEL

EQUINOX hose reels are third party tested to extinguish a fully involved EV Car fire in thermal runaway in 5 minutes using under 500L water with zero reignition.

### EQUINOX-HP MIST

EQUINOX-HP Mist systems are certified to stop li-ion battery pack to pack thermal runaway propagation with zero reignition



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LIVING BREATHING FIRE PROTECTION

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Tested & Certified By





## EV Car Park and Charging Station Fire Protection



### EQUINOX OH2 EV CAR PARK SPRINKLER SYSTEMS

TESTED & CERTIFIED TO CONTAIN, CONTROL & SUPPRESS EV CAR FIRES

POWERED BY



TESTED & CERTIFIED BY



## Applus-Certified EV & Charging Bay Fire Suppression

EQUINOX Automatic Sprinkler Systems, dosed with 3% Cold Fire additive, are independently certified by Applus+ specifically for electric-vehicle thermal runaway in parking garages. The system is engineered to control battery fires fast, limit heat and toxic vapours, and prevent escalation to neighbouring vehicles—delivering reliable, environmentally responsible protection in EV parking and charging environments.

### Proven Performance in EV Thermal Runaway Tests (Applus+)

Applus testing confirms that EQUINOX with 3% Cold Fire provides real-world EV protection outperforming plain water..

- Stops fire spread to adjacent vehicles even at 0.75 m separation, with nearby glass, tyres, mirrors, lights, and interiors remaining unaffected.
- Maintains safe evacuation and intervention conditions, keeping ambient temperatures at 2 m distance below 60°C and thermal radiation below 2.5 kW/m<sup>2</sup>.
- Protects building structure, limiting ceiling/slab temperatures to under 200°C during suppression.
- Unlike plain water, 3% Cold Fire encapsulation prevents re-ignition

### Why it matters for EV sites

From public charging hubs and residential car parks to depot and fleet facilities, EQUINOX delivers a rapid, clean knock-down and re-ignition resistance tailored to lithium-ion risk—helping operators protect people, vehicles, and infrastructure with confidence.



- 3rd party tested & certified to OH2
- Contain, control & suppress EV fires
- Prevent car to car propagation
- Prevent heat transfer to structures
- Acts faster, uses less water, less run off
- Makes area safer for fire fighters
- Supports safe evacuation
- Supporting advanced technologies available

Powered By



**ETI-2150**

**PRODUCT**

EQUINOX Automatic Sprinkler Extinguishing System, dosed with 3% Cold Fire Additive. The evaluated system is a fire extinguishing system for electric vehicles experiencing thermal runaway, designed for use in parking garages.

The characteristics and performance of the EQUINOX automatic sprinkler extinguishing system dosed with 3% Cold Fire additive, for electric vehicle fires in garages are:

- No fire spread between the burning electric vehicle and adjacent vehicles. Glass, indicators, mirrors, tyres, and interior upholstery of the adjacent vehicles remain unaffected. The adjacent vehicles are located 0.75 meters from the burning vehicle.
- Temperatures around the burning electric vehicle, at a distance of 2 meters and a height of 1.6 meters, remain below 60°C, ensuring safe evacuation conditions for occupants and firefighter intervention.
- Thermal radiation around the burning vehicle, at a distance of 2 meters and a height of 1.6 meters, remains below 2.5 kW/m<sup>2</sup>, ensuring safe evacuation conditions for occupants and firefighter intervention.
- Temperatures on the slab/ceiling structure do not exceed 200°C, preserving the structural integrity of the building.



LGAI TECHNOLOGICAL CENTER S.A. (APPLUS), has carried out the Technical Evaluation of Suitability with satisfactory results for the product:

<b>Product</b>	<b>EQUINOX</b>
<b>Product description</b>	EQUINOX Automatic sprinkler system for extinguishing electric car fires in garages
<b>Marketed By</b>	<b>EQUIPRO LTD.</b> Barttelot Court, Horsham, West Sussex RH12 1DQ United Kingdom
<b>Manufactured</b>	<b>ENGINEERED FIRE PIPING, S.L.</b> Pol. Ind. La Malena - C/ del Pino 17 45210 Yuncos (Toledo) Spain
<b>Regulation</b>	Technical assessment of the suitability for its intended use according to article 5.3 of the Royal Decree 513/2017 Regulation of Fire Protection Installations (RIPCI).
<b>Suitability assessment report</b>	25/32305061

LGAI has evaluated the initial product tests and the technical documentation and has performed the initial assessment of the factory production control. Periodically, the entity does a follow-up evaluation of the factory production control.

**ETI valid until: 1<sup>st</sup> August 2030**, as long as the product is not modified, or the conditions of manufacture at the plant, unless suspended or withdrawn by the authorized body.

Bellaterra, 1<sup>st</sup> August 2025

 LGAI Technological Center, S.A. <b>Xavier Ruiz Peña</b> Product Conformity B. U., Managing Director	
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You can check the validity of this certificate on our website: [www.appluslaboratories.com/certified\\_products](http://www.appluslaboratories.com/certified_products)






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*POWERED BY COLD FIRE*





**Equipro Ltd**

**For Trusted, High-Performance Lithium-Ion Fire Protection**

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