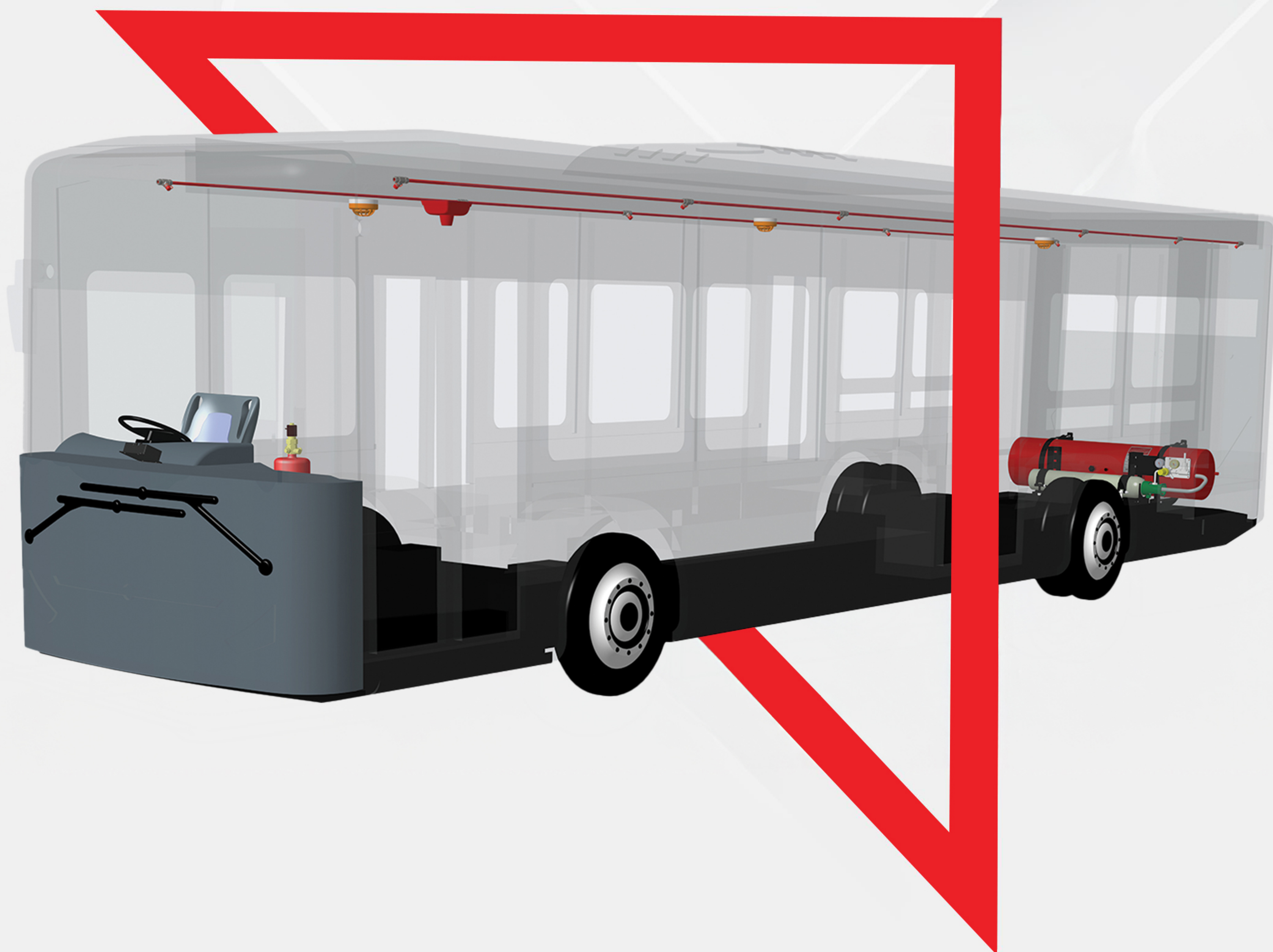




SHIMNIT
NEWFIRE



**REIMAGINED FIRE SAFETY
FOR A SAFER TOMORROW**

Shimnit New Fire Engineers Pvt. Ltd.

is a collaboration between:

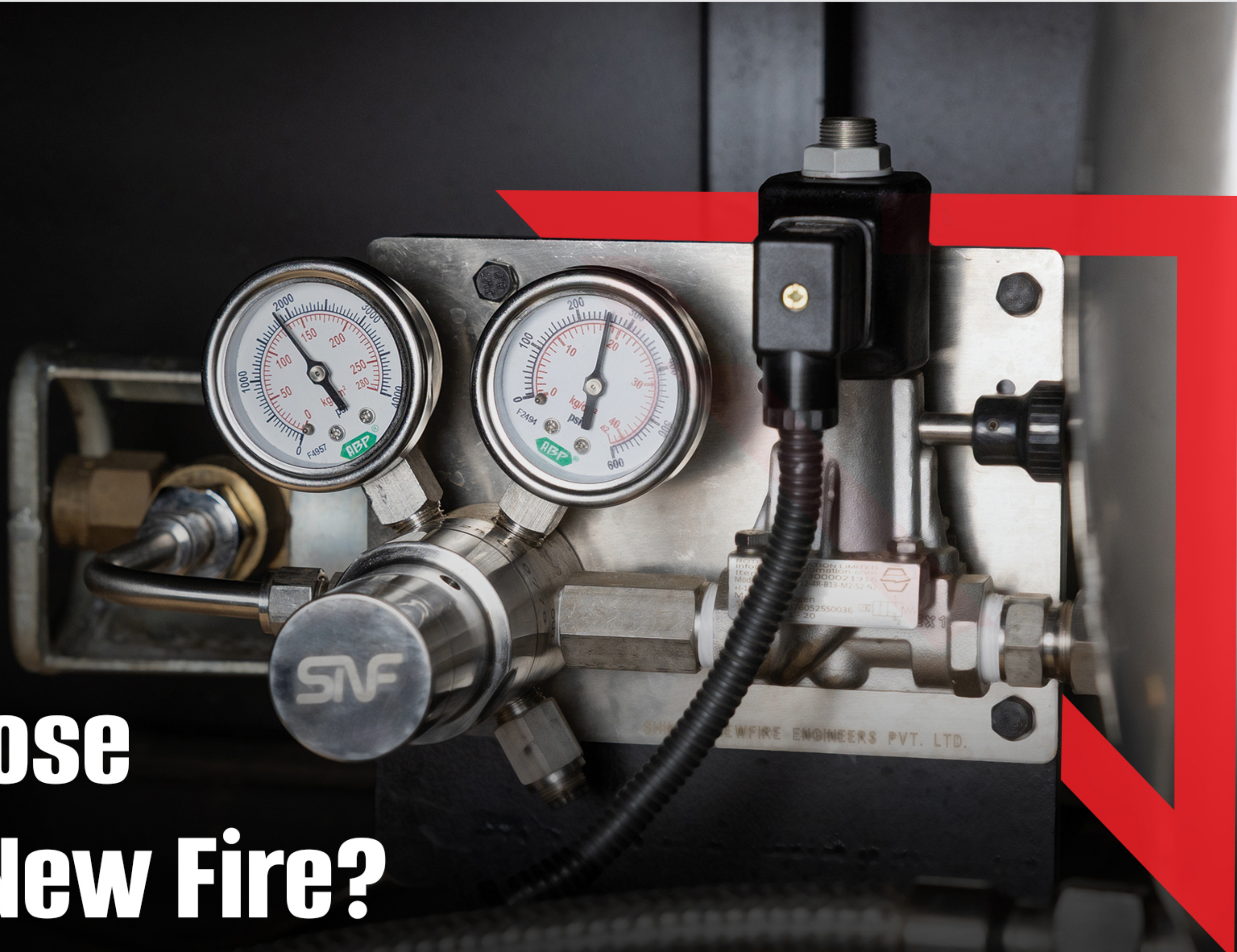
Shimnit

A leader in **vehicle compliance solutions** since **2001**, known for implementing India's first **High Security Registration Plates (HSRP)** and has a strong commitment to **safety & compliance**.

New Fire Engineers

Established in **1975**, a pioneer in **fire protection engineering**, offering **turnkey fire safety solutions** for industrial & commercial sectors in India and International locations.

Why Choose Shimnit New Fire?



Actual Product Image



Unmatched Experience and Legacy

At Shimnit New Fire, we offer a unique partnership for safety excellence focusing on the automotive sector, backed by 50+ years of experience in fire safety standards, products and solutions carefully developed through continuous learning.



Comprehensive and Customized Solution

Our holistic suite of fire safety solutions covers every aspect of fire prevention, detection, and suppression. Our collaborative approach means that we can tailor solutions to meet the specific needs of our clients, whether in the automotive sector, real estate or other industries.



Commitment to Innovation and Sustainability

We are committed to using emerging technologies, and environmentally friendly materials in all our operations. We are using **biodegradable, non-toxic, and environmentally safe material**, aligning with our commitment to a greener planet.



Nationwide Coverage, Global Vision

Our Pan-India service network enables **rapid deployment** and **reliable service** delivery across the country, a model designed to scale internationally with the same operational excellence.



On-Site Fire Safety Training Programs

We provide specialized on-site fire safety training programs designed to equip individuals and teams with the necessary **knowledge** and **skills** to respond effectively in fire emergencies. Our **hands-on training** ensures preparedness and compliance with safety regulations.



Our Fire Safety Line-Up.

Smart. Certified. Proven.

1 Automatic Fire Safety System for Buses

Designed to safeguard both the engine and occupant compartments, our system integrates advanced detection, alarm, and suppression technologies providing comprehensive, customized protection for school, staff, and long-distance passenger buses, making it ideal for both Indian and global markets.

- **FDAS & FDSS for ICE:**

Fire Detection & Alarm System (FDAS) and Fire Detection & Suppression System (FDSS) is designed for the engine bays of internal combustion engine (ICE) buses. Certified under AIS-135 and approved by the Central Institute of Road Transport (CIRT), it uses our proprietary **FOAM+** suppression agent to enable rapid fire detection and effective suppression, ensuring maximum safety and minimal downtime.

- **FDAS & FDSS for EV:**

It is developed for the battery compartments of electric buses. Engineered for high-risk thermal zones, it uses our proprietary **LITH+** suppression agent to deliver fast, reliable protection. The system is compact, efficient, and built to meet the rigorous demands of EV safety.

- **FAS & FPS:**

Fire Alarm System (FAS) and Fire Protection System (FPS) is AIS-135 certified and specifically designed for the occupant/passenger bay of school, staff, and long-distance passenger buses. It utilizes mist nozzle technology developed by the Centre for Fire, Explosive and Environment Safety – Defence Research and Development Organisation (CFEES–DRDO) to ensure rapid and effective fire protection.

2 SNF **LITH+**

Specially formulated to address the unique challenges of lithium-ion battery fires. Tested and certified, **LITH+** is an advanced wetting agent that ensures rapid cooling, deep penetration, and effective suppression.

3 1Alert Stix

Launched in 2022, this self-activating sticker detects and suppresses electrical fires in enclosed spaces. National Accreditation Board for Testing and Calibration Laboratories -tested and designed to prevent disasters at the source.



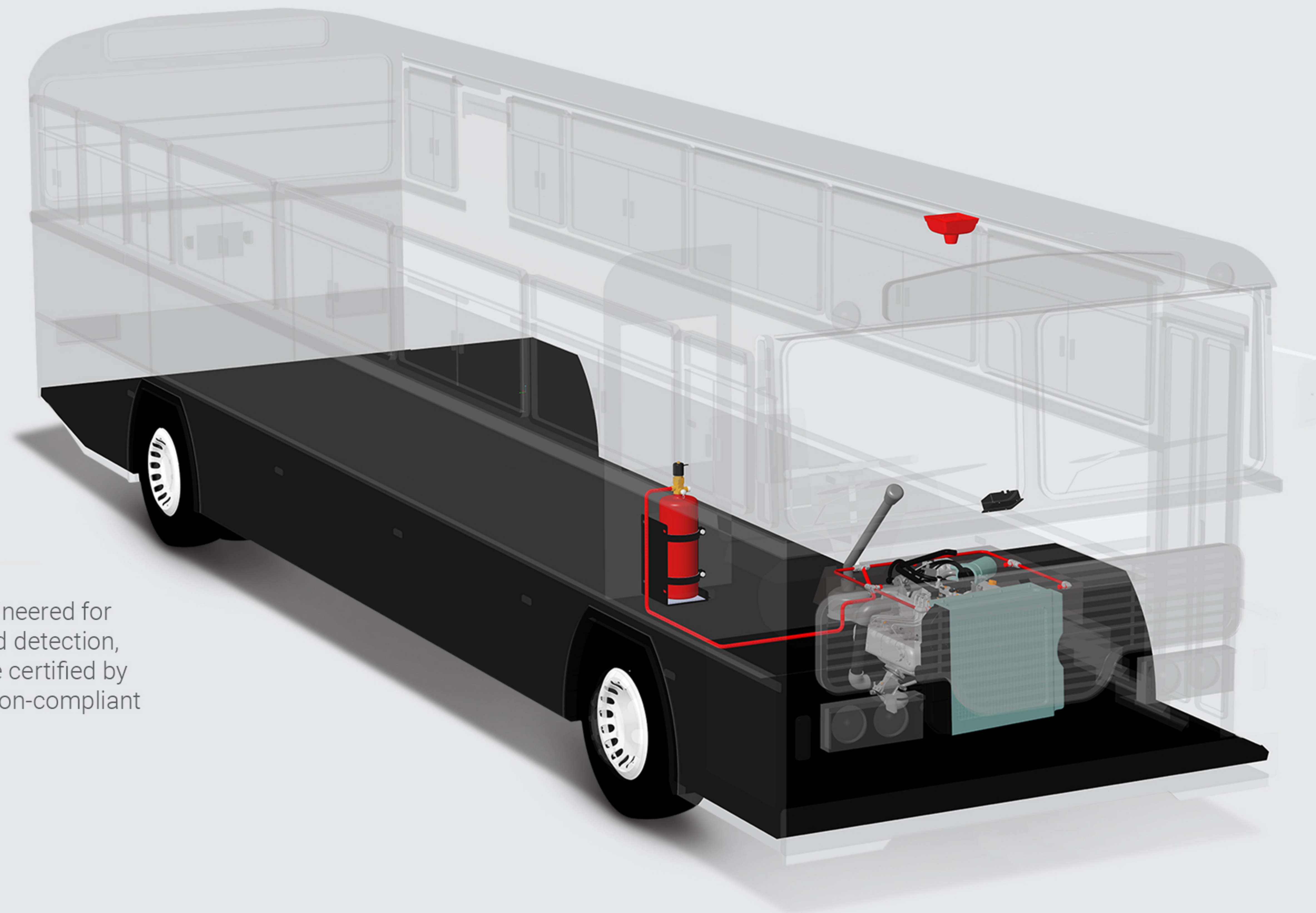
FDAS & FDSS FOR ENGINE BAY

Automatic Fire Safety System for I.C.E. Buses

Our Fire Detection and Alarm System (FDAS) and Fire Detection and Suppression System (FDSS) are engineered for high-risk zones, such as engine bay in I.C.E. (Internal Combustion Engine) buses. Designed to ensure rapid detection, swift suppression, and minimal collateral damage, these systems comply with AIS-135 standards and are certified by CIRT. Suitable for school, staff, and long-distance passenger buses, our solutions provide reliable, regulation-compliant fire safety, ideal for both Indian and global markets.

How the system works?

Engine Bay – Step-by-Step Process:



1 Fire Detection:

The Linear Heat Detection Cable (LHD) detects heat or fire along the engine bay. When the temperature exceeds a set threshold, the cable sends a signal to the control panel, triggering the fire detection system.

2 Fire Alarm Activation:

The control panel displays a fire indicator for the engine bay, and the buzzer alarm sounds to alert the operator.

3 Automatic Suppression Activation:

The suppression system is activated automatically when the LHS detects the temperature rise, triggering the discharge of foam-based suppressant to suppress the fire.

4 Manual Activation (If Automatic Fails):

If the system doesn't activate automatically, the operator can manually press the activation button on the control panel. If needed, they can also pull the pin at the cylinder to mechanically release the suppressant by opening the solenoid valve.

5 Alarm Acknowledgment:

The alarm will continue to sound until the operator presses the "accept" button on the control panel to silence it.

6 Error or False Alarm Handling:

In case of a false alarm or error, the alarm will continue until the operator presses the "accept" button, corrects the error, and then presses the "reset" button to restore system functionality.

FDAS – Fire Detection & Alarm System



Control Panel

- Automatically triggers suppression on abnormal temperature rise
- Compatible with upto three zones
- EMI/EMC Certified



Fire Strobe Siren

- Loud audible alert (90dB) for immediate evacuation
- Bright strobe light enhances visibility in smoke or low light
- EMI/EMC certified



Heat Linear Cable

- Activates at 187°C, triggering suppression within 10 seconds
- Built to endure vibration, heat cycles, and harsh engine conditions.
- UL Approved



Built Differently. Built Better.



Rugged Performance

Engineered for durability in harsh transport conditions.



Component Protection

Shields vital vehicle systems during and after fire incidents.



Reduced Downtime

Fast-acting suppression minimizes operational disruption.



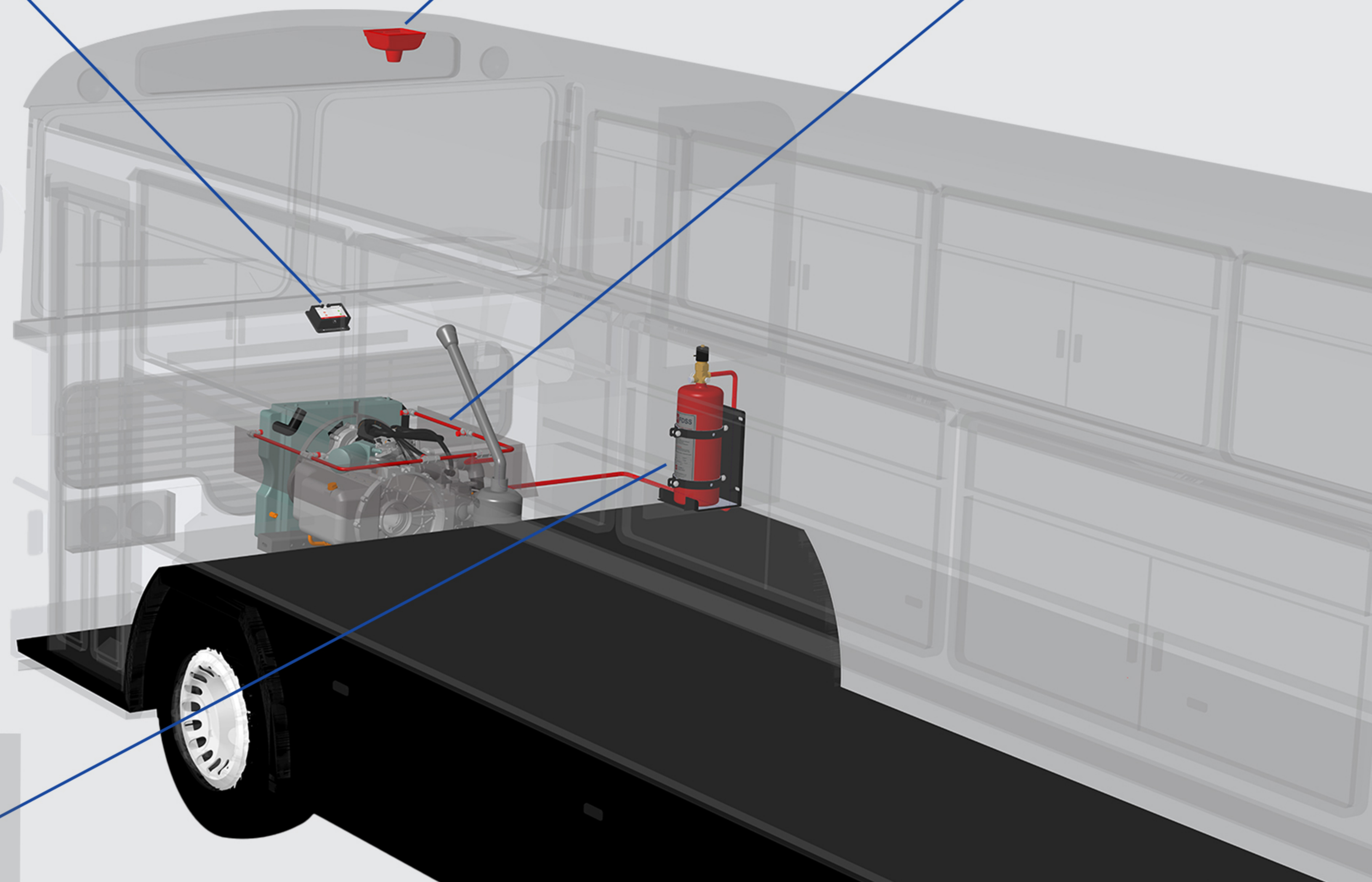
Low Maintenance

Built with durable components to ensure long service intervals.

FDSS – Fire Detection & Suppression System

Foam-Based Suppression Agent

- Forms a thick foam blanket that cuts off the oxygen supply
- Rapidly cools the fire and surrounding components
- Creates a long-lasting barrier to prevent re-ignition
- Discharges at a pressure of 18–20 bar for fast suppression
- Typical spray duration: 5–10 seconds, depending on configuration
- Leaves minimal residue, ensuring quick post-fire cleanup
- Non-corrosive and safe for use around electronics
- Available in 6/9 Ltrs



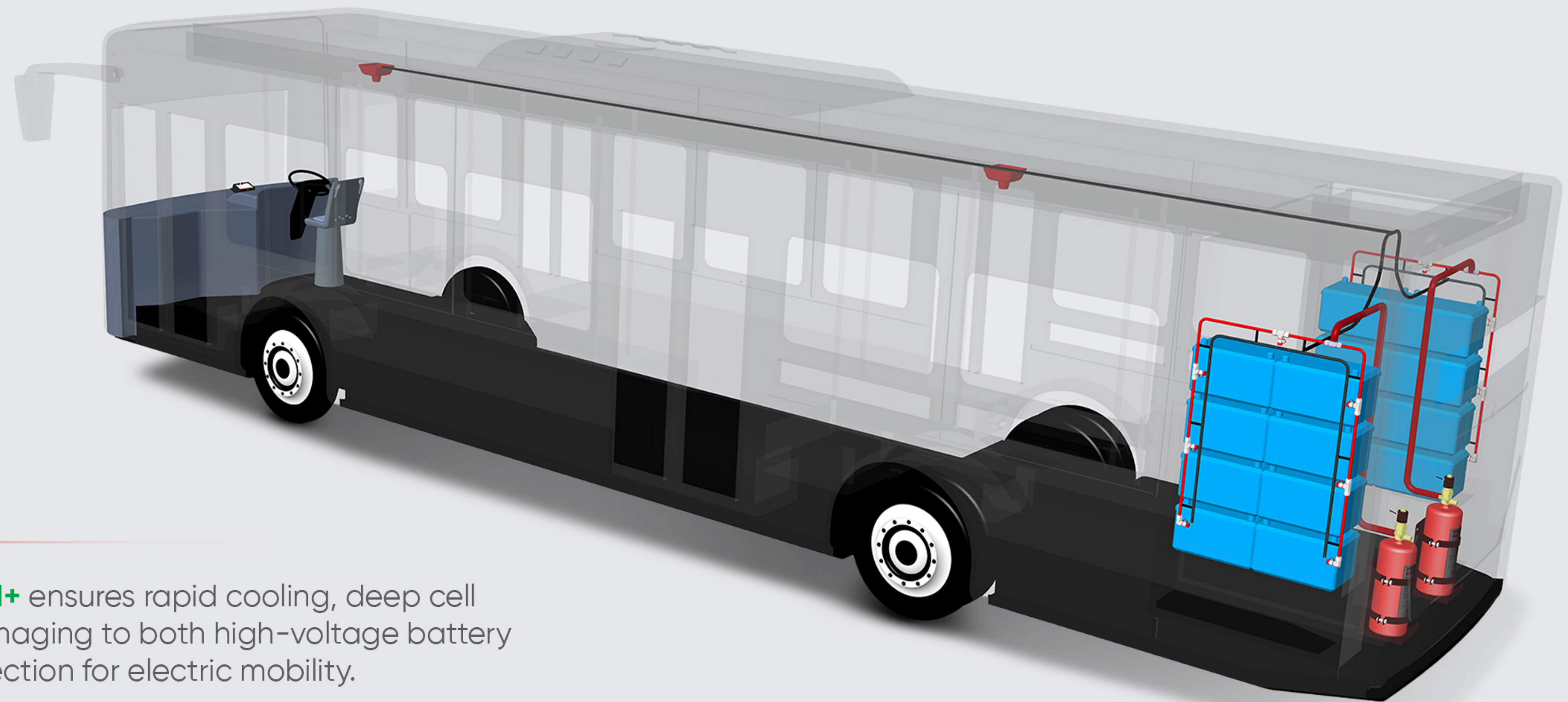


LITH+

FDAS & FDSS FOR LITHIUM-ION BATTERY

Automatic Fire Safety System for EV Buses

Tested and engineered as an advanced wetting agent, SNF LITH+ ensures rapid cooling, deep cell penetration, and effective prevention of re-ignition. It is non-damaging to both high-voltage battery systems and sensitive electronics, offering safe and reliable protection for electric mobility.



How the system works?

Battery Compartment – Step-by-Step Process:

1 Fire Detection:

The Linear Heat Detection (LHD) cable senses abnormal heat in the battery pack and triggers the fire detection system when temperatures exceed a set threshold.

2 Fire Alarm Activation:

The control panel displays a fire indicator for the battery compartment, and the buzzer alarm sounds to alert the operator.

3 Alarm Acknowledgment:

The alarm will continue to sound until the operator presses the "accept" button on the control panel to silence it.

4 Automatic Suppression Activation:

The suppression system automatically activates when the LHD cable detects a temperature rise, releasing SNF LITH+, a lithium-ion battery fire suppressant.

5 Manual Activation (If Automatic Fails):

If the system fails to activate automatically, the operator can manually release SNF LITH+ by pressing the control panel button or pulling the pin on the cylinder to open the solenoid valve.

6 Error or False Alarm Handling:

In case of a false alarm or error, the operator can silence the alarm by pressing the "accept" button, correct the issue, and press the "reset" button to restore system functionality.



LITH+

Engineered for Li-ion Fire Safety



SNF LITH+ is tested to suppress lithium-ion battery fires and prevent re-ignition.



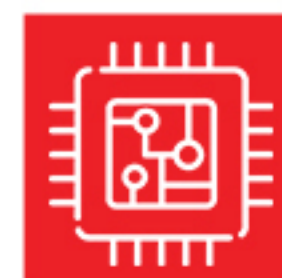
Vaporizes at flame temperature (~200–250 °C), to absorb heat and stop thermal runaway



Interrupts thermal runaway by creating a barrier that isolates heat and limits oxygen contact.



Penetrates enclosed battery packs and layered modules for complete suppression.



Leaves minimal, non-corrosive residue safe for high-voltage components and sensitive electronics.

FDSS – Fire Detection & Suppression System:

Wetting Agent – FDSS LITH+

- Specially formulated for lithium-ion battery fires in EVs
- Low pressure mist discharge at 9–10 bar for deep and even coverage
- 1–2 minute spray ensures sustained suppression and cooling
- Thinning under pressure to reach between tightly packed cells
- Vaporizes at flame temperature to absorb heat and stop thermal runaway
- Built for high-temperature, high-vibration EV environments
- Available in 6/9 Ltrs

FDAS – Fire Detection & Alarm System



Control Panel:

- Automatically triggers suppression on abnormal temperature rise
- Compatible with up to three zones
- EMI/EMC Certified



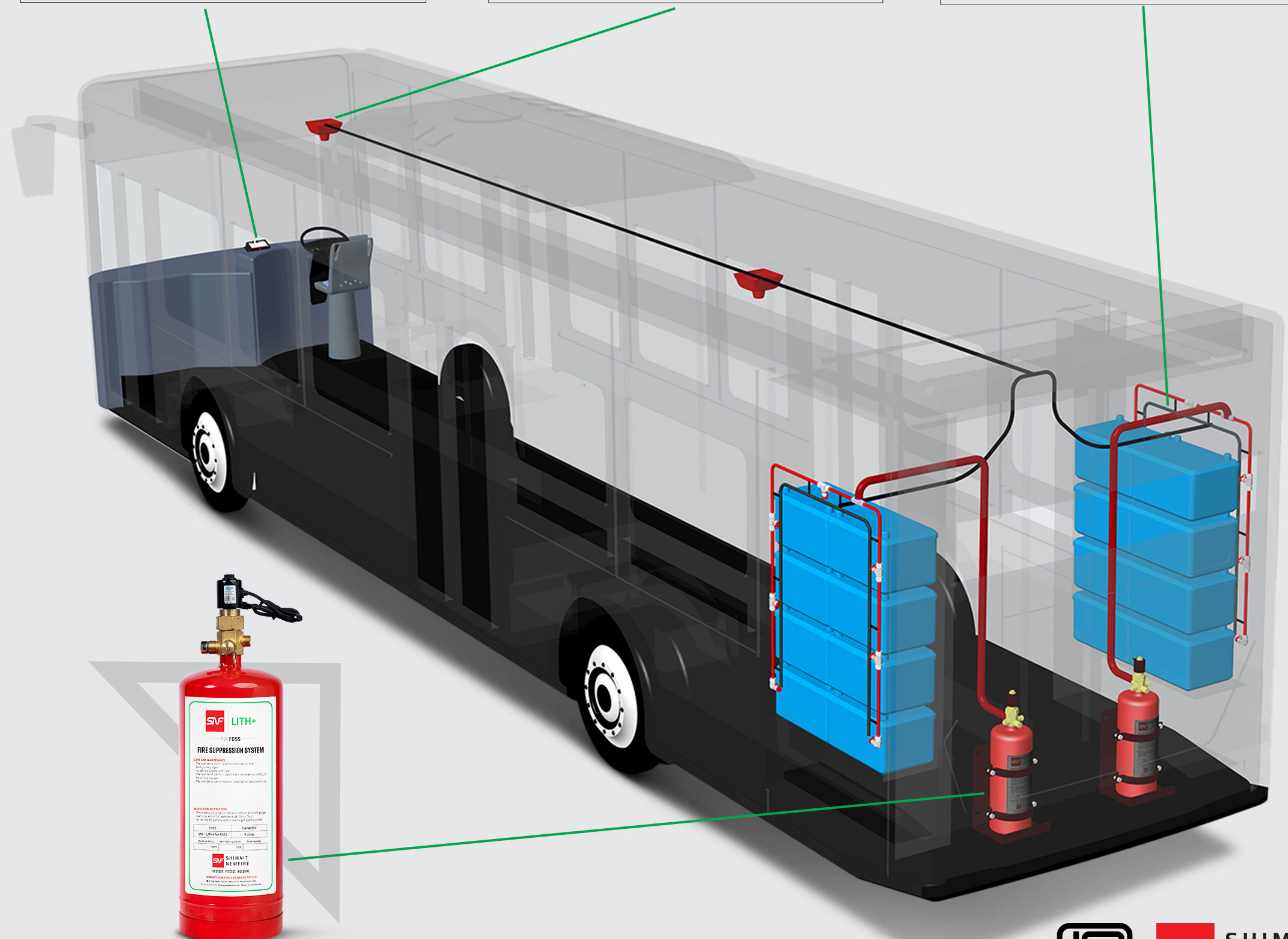
Fire Strobe Siren

- Loud audible alert (90dB) for immediate evacuation
- Bright strobe light enhances visibility in smoke or low light
- EMI/EMC certified



Heat Linear Cable

- Activates at 187°C, triggering suppression within 10 seconds
- Reliable under vibration, thermal cycling, and harsh conditions
- UL Approved



SHIMNIT
NEWFIRE

FAS & FPS FOR OCCUPANT BAY

Automatic Fire Safety System for I.C.E. & EV Buses

Our Fire Alarm System (FAS) and Fire Protection System (FPS) are designed to deliver reliable and rapid fire response in the occupant bay of buses. Developed using advanced mist nozzle technology from CFEES-DRDO, the system integrates detection, alarm, and suppression components to ensure comprehensive passenger safety. Ideal for long-distance and school buses, it meets AIS-135 standards and aligns with international fire safety benchmarks making it suitable for deployment in both Indian and global markets.

How the system works?

Occupant Bay – Step-by-Step Process:

1

Smoke Detection:

The smoke detector detects smoke in the occupant bay (passenger area).

2

Fire Alarm:

The control panel displays a fire indicator for the occupant zone and the buzzer alarm sounds.

3

Alarm Acknowledgment:

The operator presses the “accept” button to silence the alarm.

4

Suppression Activation:

This system sprays water for a minimum of 3 minutes, controlling the fire and reducing smoke in the bus, allowing passengers to evacuate.

5

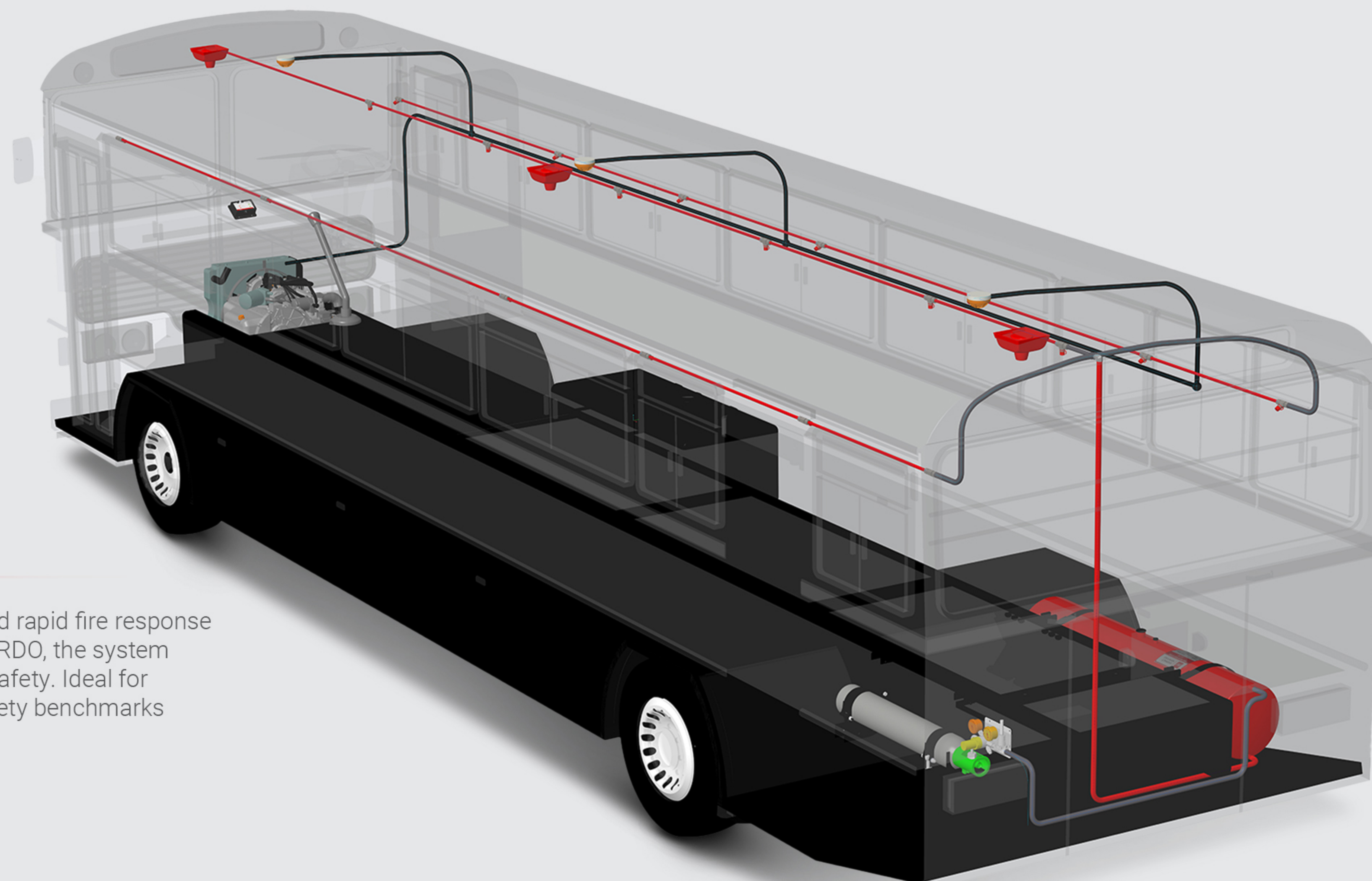
Manual Override Option:

For added safety, the mist system can also be activated by manually opening the valve on the N₂ tank at the rear of the bus, ensuring continuous protection.

6

Error or False Alarm Handling:

The operator can stop the alarm by pressing the “Accept” button, rectify the error, and then press the “reset” button to restore the system’s functionality.



FPS - Fire Protection System

Water Mist Nozzle

- Tested and certified by CFEES-DRDO
- Atomizes water into ultra-fine mist for effective fire suppression
- Provides a minimum 3-minute spray duration
- Delivers 1.65 L/min at 7 bar pressure
- Constructed from SS 304/316 with a 90°+ spray angle for wide coverage

Nitrogen Cylinder

- Available in 6.8L, 10.2L, and 13.5L capacities
- Built to perform in rugged, mobile environments
- Vibration-resistant installation ensures stability in transit
- Petroleum and Explosives Safety Organization (PESO) approved

Suppression Agent Cylinder – Occupant Bay

- Stainless steel (SS) construction for water-based agent; corrosion-resistant
- Heavy-duty bracket ensures secure, vibration-resistant mounting
- Available in multiple sizes for buses with 20m³ to 80m³
- Modular configuration for flexible bus integration

FAS - Fire Alarm System



Control Panel:

- Automatically triggers suppression on abnormal temperature rise
- Compatible with up to three zones
- EMI/EMC Certified



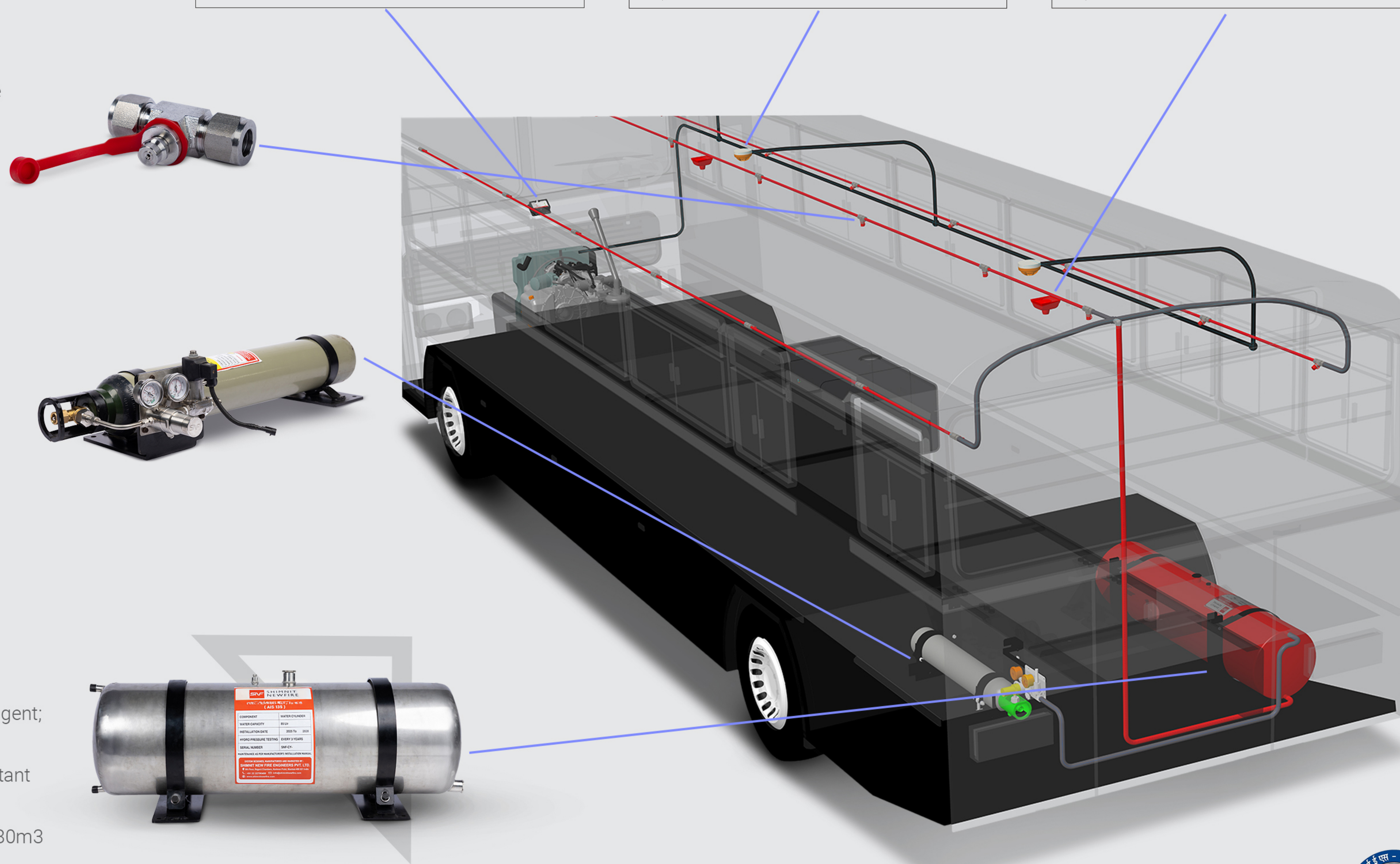
Optical/Heat Multisensor Detector

- Combines smoke and heat sensing for rapid detection
- Dust compensation minimizes false alarms
- Operates between -40°C to +70°C.



Fire Strobe Siren

- Loud audible alert (90dB) for immediate evacuation
- Bright strobe light enhances visibility in smoke or low light
- EMI/EMC certified





LITH+

Introducing SNF LITH+

Specialized Lithium-Ion Battery Fire Extinguisher

With the rapid adoption of electric vehicles (EVs) and lithium-ion battery technology, the risk of battery-related fires is a growing safety concern. These fires are complex, often involving thermal runaway, intense heat, and hazardous gas emissions.

SNF LITH+ is specially formulated to address the unique challenges of lithium-ion battery fires. Tested and certified, this advanced wetting agent ensures rapid cooling, deep penetration, and effective suppression providing dependable protection for life, property, and the environment.

How SNF LITH+ Works



Rapid Cooling

Cools burning batteries up to 50 times faster than water, stopping thermal runaway quickly



Thermal Barrier

Forms a layer that blocks heat and oxygen, limiting fire spread



Deep Penetration

Low-viscosity agent infiltrates individual battery cells, enabling thorough internal suppression



Re-ignition Prevention

Stabilizes affected areas to prevent the fire from reigniting after suppression



Polymer battery Module



Cylindrical battery Module





LITH+

Why use SNF LITH+?

1

Tested and Reliable:

Successfully tested with no re-ignition observed post-thermal runaway, ensuring trusted, proven performance.

2

Electronics-Safe Formula:

Non-corrosive and safe for use around sensitive electrical systems, making it ideal for EVs and high-tech environments.

3

Environmentally Responsible:

Biodegradable, non-toxic, and leaves no harmful residue. Safe for people, property, and the planet.

4

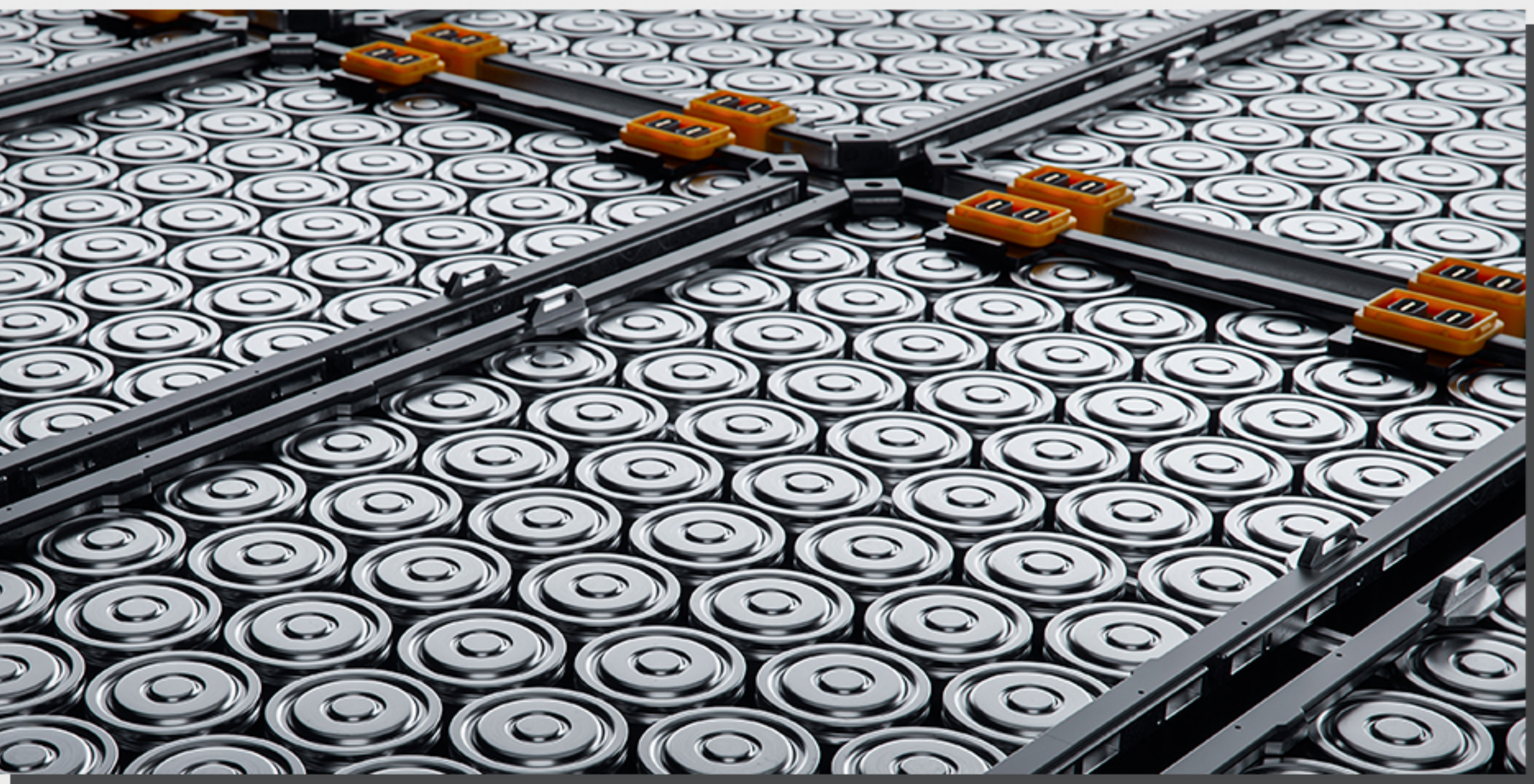
Long-Lasting Stability:

10-year shelf life without hardening or breakdown, reducing maintenance and replacement costs.

Where SNF LITH+ Is Used



EV Charging Infrastructure



Battery Storage Warehouses



Energy Storage Systems



Electric Vehicles

Types of Fire



Available Sizes:

6 Litre, 9 Litre & 25 Litre

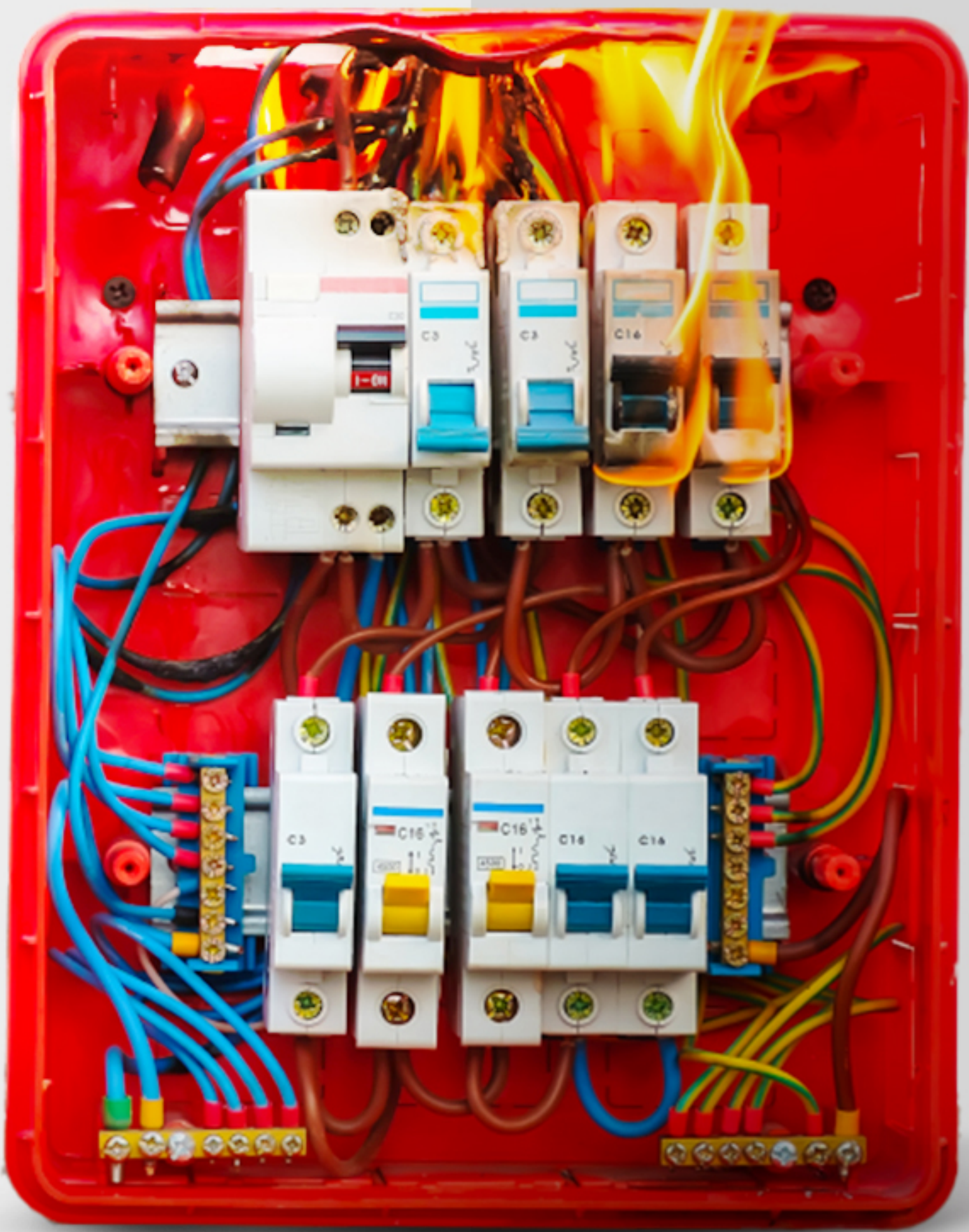


SHIMNIT NEWFIRE

1Alert Stix – Automatic Fire Extinguishing Stickers

Did you know?

- 70% of all fire incidents are caused by short circuits or electrical failures.
- A small fire can become a disaster in just 2 minutes.
- Over 1.6 million fire accidents were recorded in India in 2021.



The Solution – 1Alert Stix & Stix Plus

Fire extinguishing stickers designed to automatically detect and control electrical fires. No wiring, no maintenance, no downtime. Just peel, stick, and protect.

Key Features

- Automatic Activation at 120°C (Stix) / 170°C (Stix Plus)
- Easy Installation – Peel & stick or mount
- Non-toxic & eco-friendly
- No damage to electrical components
- Long Lifespan – 5 years (Stix) / 10 years (Stix Plus)
- No maintenance required



Product Range (1Alert Stix)

Model	Volume Capacity	Dimensions (mm)	Activation Temp	Lifespan
1Alert Stix 20	20 Litres	100 x 40 x 1	120°C ± 5°C	5 Years
1Alert Stix 30	30 Litres	100 x 100 x 1	120°C ± 5°C	5 Years
1Alert Stix 50	50 Litres	150 x 100 x 1	120°C ± 5°C	5 Years
1Alert Stix 65	65 Litres	200 x 100 x 1	120°C ± 5°C	5 Years
1 Alert Stix Plus (For large Enclosures)	400 ltr	80 x 50 x 27	170°C ± 5°C	10 Years

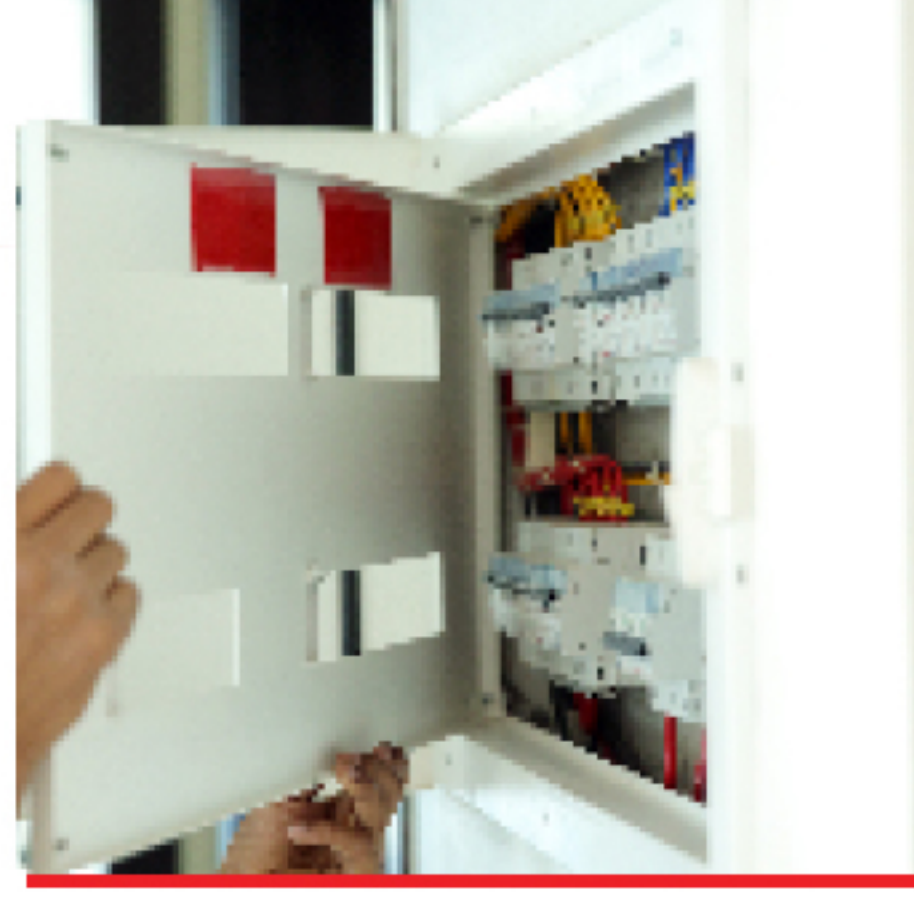
How It Works & Applications

How It Works



Peel

Remove the adhesive layer on the back of the sticker.



Stick

Place inside the enclosure – not more than 60 cm from the base (for Stix). Mount Stix Plus using adhesive, screws, or cable ties.



Protect

Once temperature hits 120°C/170°C, the unit activates and releases the extinguishing agent within seconds, controlling the fire at the source.

The Technology

1

Stix:

Microcapsules release FK-5-1-12 agent when the shell bursts at 120°C.

2

Stix Plus:

Releases condensed aerosol (20g) stored in a flame-retardant ABS shell when heat cables detect 170°C. No pressurization, no cleanup.

How To Choose The Right Product

Use this formula to calculate enclosure volume:

Length x Width x Height (in cm) ÷ 1000 = Volume in Litres

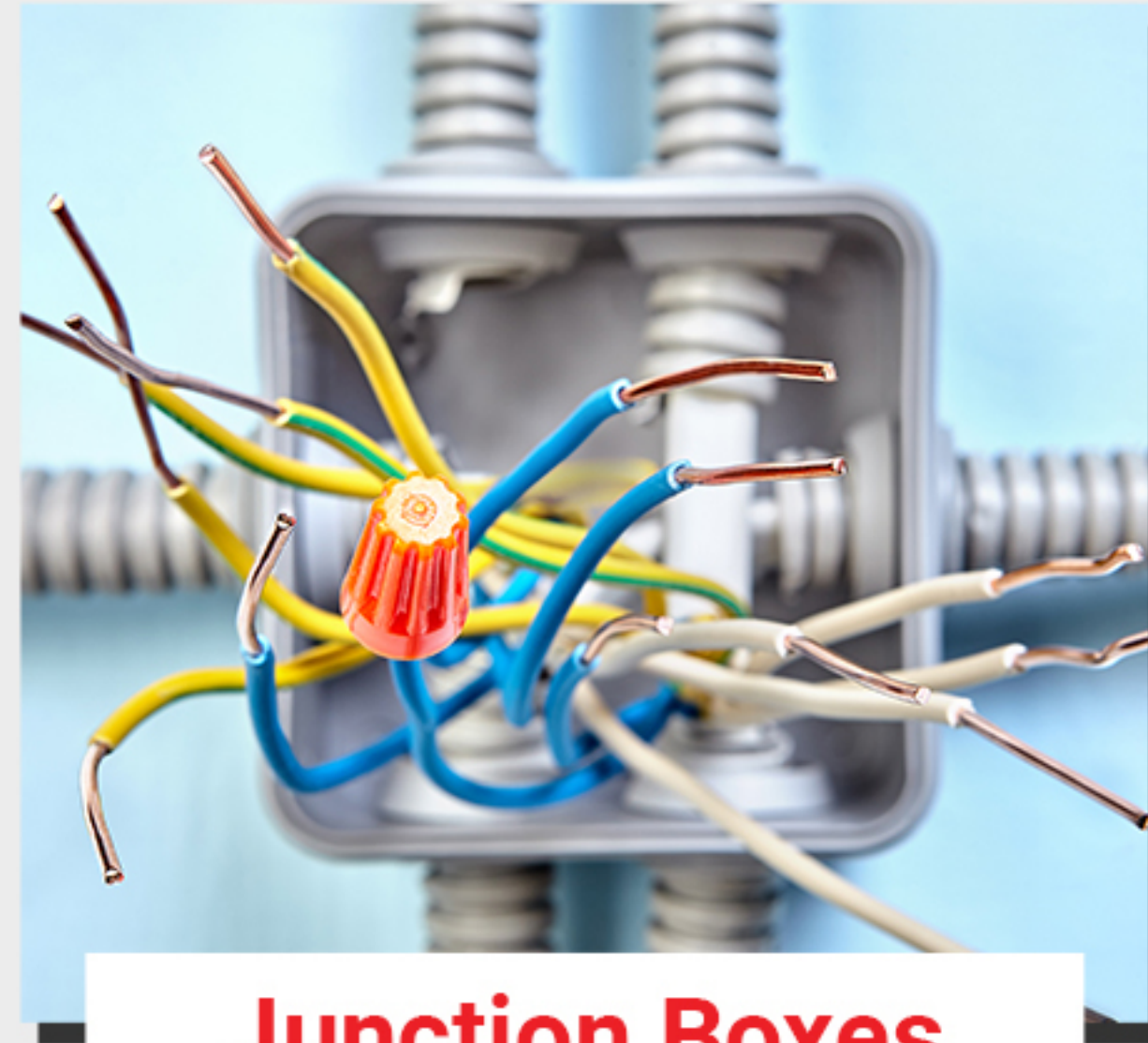
Example: 50 cm x 20 cm x 50 cm = 50,000 cm³ / 1000 = 50 Litres

→ Use **1Alert Stix 50**

Ideal For Protecting:



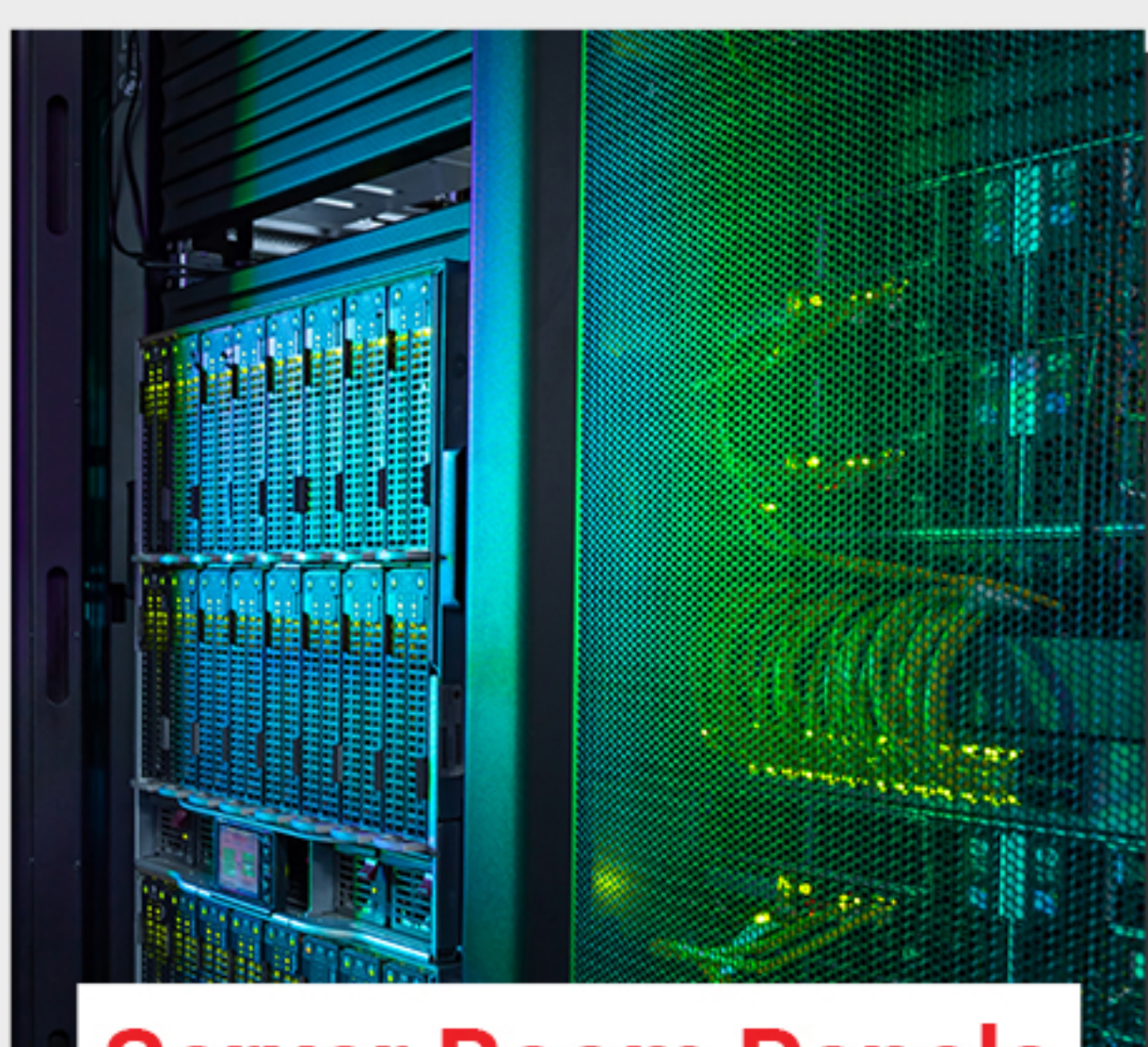
Controll Panel



Junction Boxes



MCB Boards



Server Room Panels



Air Conditioners



EV Charging Stations



**SHIMNIT
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