



**BUSShield**  
Advanced bus fire protection systems

**DRIVEN**  
*By*  
**INNOVATION**

- Durable & Reliable
- Cost Effective
- Simple Installation & Maintenance
- Cloud Based Wi-Fi Diagnostic



# BUSShield

Advanced bus fire protection systems

## BUSSHIELD SYSTEM

The advanced Lehavot BUSShield system provides comprehensive fire protection for millions of passengers using public transportation around the world every day, combining excellent reliability, low lifecycle cost and outstanding fire suppression performance.

Lehavot's technology base on military harsh environment requirements of reliability, durability and ultra-fast response.

Tens of thousands of installations and hundreds of successful activations ensure that Lehavot's BUSShield is widely recognised as a market leader in the automotive fire protection.



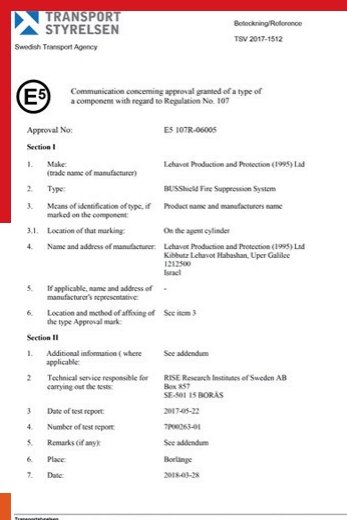
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## LEHAVOT BUSSHIELD ADVANTAGES:

- **FRV** - Fast Release Valve 10ms Extinguishing cylinders (MIL-STD-810).
- **Flexible stainless** steel pipes (Teflon internal) - simple and fast installation.
- Unique on-line **cloud-based Wi-Fi diagnostic** platform - 30% bus downtime reduction - ownership costs reduction.
- **Dry chemical** ABC best-in-class for excellent suppression performance.
- Internal recharging **batteries back up**.
- **Built in test** for continues system monitoring.
- **Simple installation & maintenance**.



Advanced fire protection systems

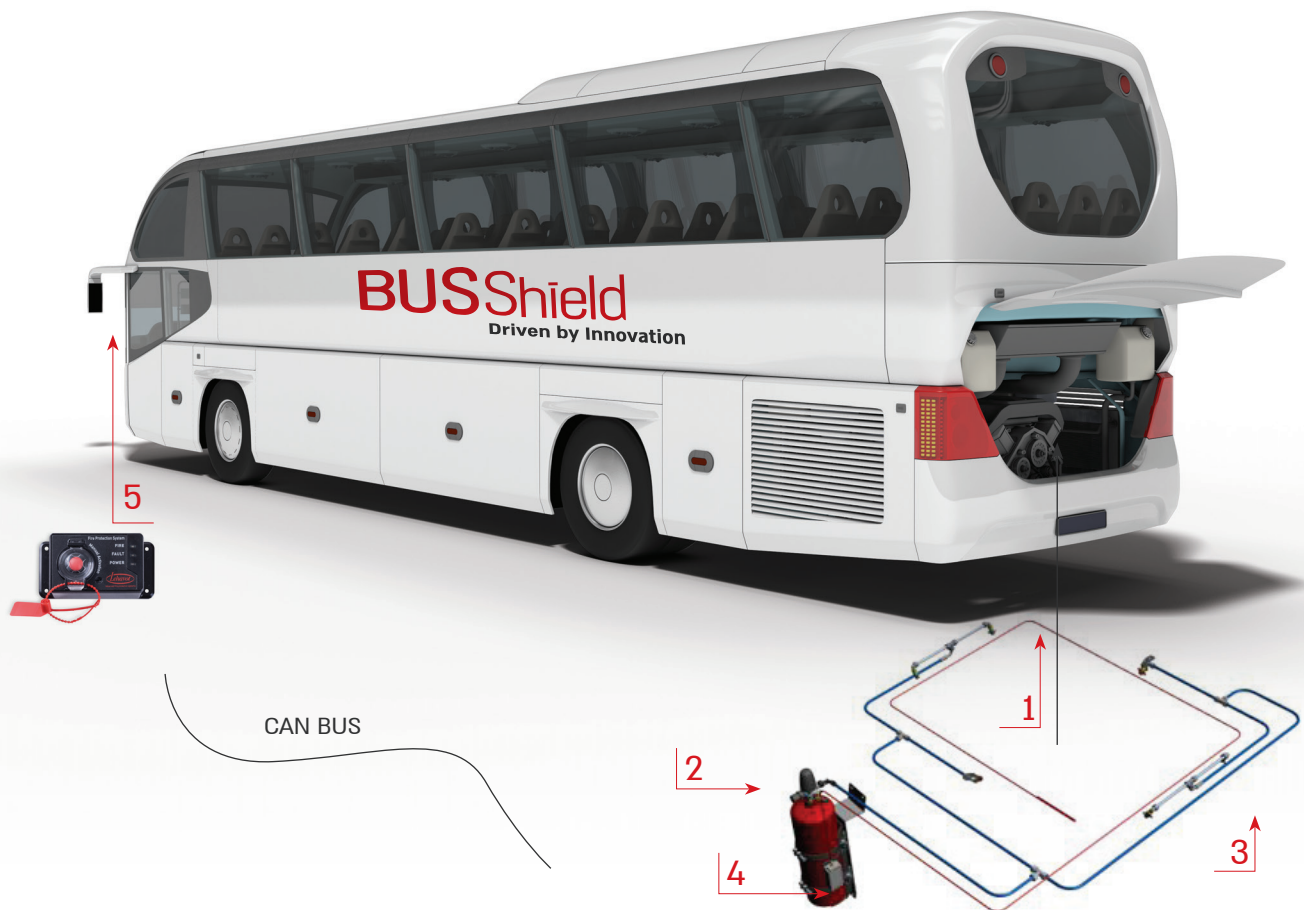


## INSTALLATION - SIMPLE & EFFICIENT

- One cylinder - Minimal foot print.
- Flexible pipes and hose - Installation friendly.
- Small amount of nozzles (6-9).
- Modular concept.
- Simple cabling.
- Automotive standard connectors.
- No Special tooling or equipment required.
- Built-in-Test (BIT) for complete system monitoring.

## MAINTENANCE-SIMPLE, FAST

- Easy access to main components.
- Fast parts replacement.
- Pulse coded fault indication.
- Accurate failures diagnostic.
- No special equipment or tools required.
- Technical support 24/7.
- On-line cloud-based Wi-Fi diagnostic.





## SYSTEM MAIN COMPONENTS

1. Linear Heat Detector
2. Dry Chemical Automatic Cylinder
3. Distribution system
4. Junction box
5. HMI - cloud-based Wi-Fi diagnostic

## TENS OF THOUSANDS OF INSTALLATIONS WORLDWIDE:

- Buses
- Military armor vehicles
- Heavy duty and off-road vehicles

	Feature	
<b>Linear Heat Sensing Detector</b> 	<b>Simple &amp; Reliable Detection</b>	
	Operation Temperature	180C°
	Connection monitoring	Continuous EOL 10K Resistor
<b>VPS 8kg/10Kg Automatic Cylinder</b> <b>FRV - Fast Release Valve</b> 	<b>Best Design for Total Flooding</b>	
	Valve	FRV-Fast Release Valve 10ms, 3/4" Outlet
	Actuator	Metron™ 1W/1A
	Pressure SW	Including
	Environmental Conditions	MIL-STD-810
	Valve Working Media	Dry Chemical, Clean Agent, Water-Mist, Foam
	VPS Agent	ABC-94 Dry Chemical
	Cylinder Orientations	Vertical, Horizontal
	Agent Replacement	Every 6 Years
	Operating Power	8-34 Vdc, 240mW MIL-STD 1275
	Dimensions	- Height: 8Kg 667mm, 10Kg 758mm - Diameter: 180 mm - Weight(gross): 8Kg(20 kg), 10Kg(23.3Kg)
<b>Distribution System</b> 	<b>Adaptable, Easy to Install</b>	
	Assembly	Easy, Modular
	Hose	Flexible 1/2" and 3/8" PTFE SAE 100R 14A
	Pipes	Stainless Steel Ø12mm
	Nozzles	Total Flooding
	Nozzles Protection	Silicon Cover
<b>Junction Box</b> 	<b>Redundant, Harsh Environment</b>	
	Lines Monitoring	- Actuator Disconnected - Low Pressure - Pressure SW Disconnected - Detector Disconnected
	Extinguisher Activation	Automatic + Remote (HMI)
	Ingress Protection	IP-67, IP69K
	Environmental conditions	MIL-STD-810, -40C° -125C°
	Connectors	Terminal Block
	Power	8-34 Vdc, 200mW, MIL-STD 1275
	Power Backup	Internal Batteries
	Communication with HMI	CAN BUS
<b>HMI</b> 	<b>Built In Test Event Logging</b> <b>Cloud-Based Wi-Fi Diagnostic</b>	
	Mounting	Surface or Flush
	Manual Activation SW	- Seal Protection. - Optional
	Visual Indications	Fire, Fault, Power
	Audible Indication	Fire - Continuous, Fault - Pulse Coded
	Events Log	RTC, Alarms & Faults
	Connectivity to driver panel	Dry Contact: Fault NC, Alarm NO, A/C NC RS-485
	Connectors	Molex Automotive
	Power	8-34 Vdc, 240mW, MIL-STD 1275
	Communication with Unique Junction Box	CAN BUS

## ABOUT LEHAVOT

LEHAVOT an Israeli based company has been recognized as a pioneer and leading provider of high quality Fire Protection Systems for 70 years, which offers custom designing, modeling, testing, and manufacture from a single supplier.

Incorporating the most advanced technologies, LEHAVOT's best-of-breed solutions have been proven in every level of fire protection.

Today's tailor-made solutions help global customers meet the challenges of the 21st century, delivering superior performance over a long service life at the most competitive price.

## WHY LEHAVOT?



**70 years in Fire Protection Solutions**



**Global Presence**



**Advanced Technology**



**Innovative Design**

## AUTOMATIC FIRE PROTECTION SYSTEMS BY LEHAVOT



Advanced bus fire protection system



WCK Kitchen fire suppression system



Total protection for military vehicle



Advanced oil storage tank fire protection system



Advanced fire protection systems





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