

## Application: Armored and Tactical Vehicle Fire Protection

More than 8,000 all-terrain, mine-resistant, ambush-protected vehicles (M-ATV) are protected by automatically activated aerosol fire extinguishing systems. These vehicles are deployed in various combat zones.

Vehicle durability through battlefield experiences is one of the primary objectives. The fire detection and suppression systems are installed in various parts of the vehicles to protect the engine. The system is specifically tailored to the vehicle's interior/exterior shape and volume and contains a specific fire extinguishing agent designed to extinguish the fire of a predicted scenario in the protected area.



The system addresses slow growth and rapidly developing fuel fires generated by various explosive effects. It extinguishes petroleum, oil, and lubricant fires before crew members are incapacitated or significant vehicle damage occurs.

System Consists of:

- Rugged, Programmable Fire Heat Detection and Release System.
- Lightweight aerosol fire suppression

The aerosol generators can be activated either manually or automatically from a control device. Upon activation, aerosol generators produce an exceptionally effective, ultra-fine, potassium based aerosol. The generators have a lifespan of ten years.



Unlike other fire extinguishing systems, aerosol generators are cost effective to install and maintain due to the elimination of the cost, space, and weight of pressure vessels, piping, and other expensive installation considerations associated with other extinguishing systems.

On an agent weight spectrum, aerosol is ten times more effective than gaseous agent alternatives. The aerosol efficiency is a function of its patented design, aerosol composition, and ultra-fine particle size. Fire suppression is rapidly achieved through interference between the ultra-fine particulate and the flame's free radicals; this interference terminates fire propagation.



## Advantages of Stat-X° Aerosol fire extinguishing system:

- Environmentally Friendly, ODP = 0 (No Global Warming Potential)
- Easy installation and low maintenance.
- Tested & Listed to UL 2127 for Class A, B, C Fires
- Tested to US MIL standard 810G, 461 & 1275.
- EPA SNAP Listed for normally occupied spaces.
- Suitable for Enclosed Facilities & Local Applications
- Minimal cleanup
- Suspends in air & vents quickly
- Compact (up to 90% reduction in size & weight)
- Available different sizes.
- Stainless steel body

## Sample Installation of Stat-X System:

Since the vehicle is deployed in the battlefield, it is subject to explosions, requiring the fire extinguishing system for this application to be rugged and properly secured. The Stat-X° system is secured by heavy duty brackets and tested for MIL standards to withstand the vibrations caused by explosions.

Engine compartment fire suppression system provides the following performance:

- Complete detection coverage by means of rugged overheat detector, which can withstand dirt and is easy to install in areas such as under the engine, batteries, auxiliary power unit, turret floor areas, etc.
- Two levels of operation: overheating will activate an alarm and fire will automatically activate the extinguishing system
- Release panel should have built in test and monitoring indication
- Operational under all possible vehicular working conditions
- Shut downs the engine before agent discharge.

