



Solutions  
for Energy  
and Storage  
Infrastructure



# Fire Protection for Modern Energy Systems

## DSPA Aerosol Fire Suppression for enclosed electrical and storage infrastructure

Modern energy infrastructure is rapidly evolving. Electrification, decentralised grids and energy storage systems are becoming integral to power generation and distribution. As electrical density increases, so does the complexity of fire risk, shifting from conventional material fires to enclosed, high-energy electrical events. These environments require a protection strategy designed for electrical and gas-phase combustion scenarios, where re-ignition, limited access and persistent energy sources must be considered in the suppression approach.

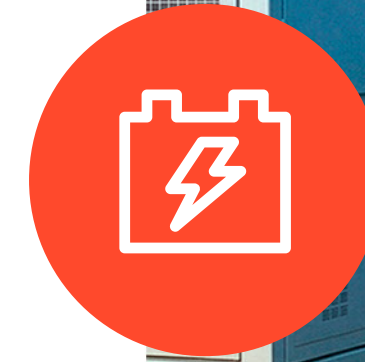
DSPA Aerosol suppresses fire by interrupting the chemical chain reaction of combustion. The system provides a certified hold time of **at least 30 minutes**, maintaining a stable atmosphere after discharge and reducing the risk of re-ignition in enclosed energy equipment. This performance is certified even with minor enclosure leakage (0.1%). The compact, non-pressurised generators allow integration into existing infrastructure without major mechanical modifications, making the technology suitable for both new installations and retrofit projects.





## Solar Energy Storage Systems (ESS)

Photovoltaic installations increasingly rely on lithium-ion storage to provide backup power and load management. DSPA Aerosol helps contain fire events inside enclosed battery cabinets and indoor storage installations, with the possibility of built-in protection integrated directly within the enclosure design.



## Battery Energy Storage Systems (BESS)

Lithium-ion battery incidents involve gas-phase combustion, cell-to-cell propagation and delayed re-ignition after thermal runaway. DSPA Aerosol provides a certified hold time of **at least 30 minutes**, maintaining atmospheric control after discharge and supporting containment inside enclosed battery containers, even with minor enclosure leakage (0.1%).



## Wind Turbine Electrical Compartments

Converters, brake resistors and control cabinets operate under continuous load and restricted access conditions. DSPA Aerosol generators enable protection directly inside electrical cabinets or through total flooding of the nacelle compartment, without pipework.



## Power Conversion & Electrical Enclosures

PCS units, inverters, switchgear and distribution cabinets contain concentrated electrical ignition sources. Non-pressurised aerosol suppression allows integration inside sealed compartments with minimal installation impact.



### Plug-and-Protect

Compatible with any certified FACP. Protects enclosed spaces starting from small volumes.



### Pressure-Free Architecture

No cylinder banks, no pipework, no dedicated storage area.



### Flexible Installation

Mounted inside cabinets, containers or equipment rooms. Modular and suitable for retrofit projects.



### Scalable Protection

Available in multiple generator sizes. From small enclosures to large energy containers.



### Efficiency

Only a small amount of aerosol is needed to extinguish fires.



### Certified 30-minute Hold Time

Maintains stable conditions after discharge and reduces re-ignition risk in enclosed energy equipment.



### Low Maintenance

15-year serviceable lifetime. No periodic pressure checks or refilling.



**A B C**  
**CLASS FIRE  
CERTIFIED**

#### SYSTEM & COMPONENT STANDARDS

EN 15276-1    BRL-K21045  
ISO 15779    UL 2775  
AS 4487    COMPLIANT

#### HAZARDOUS AREA & EXPLOSION PROTECTION

EN 1127-1    EN 60079-15  
EN 60079-0  
EN 60079-15

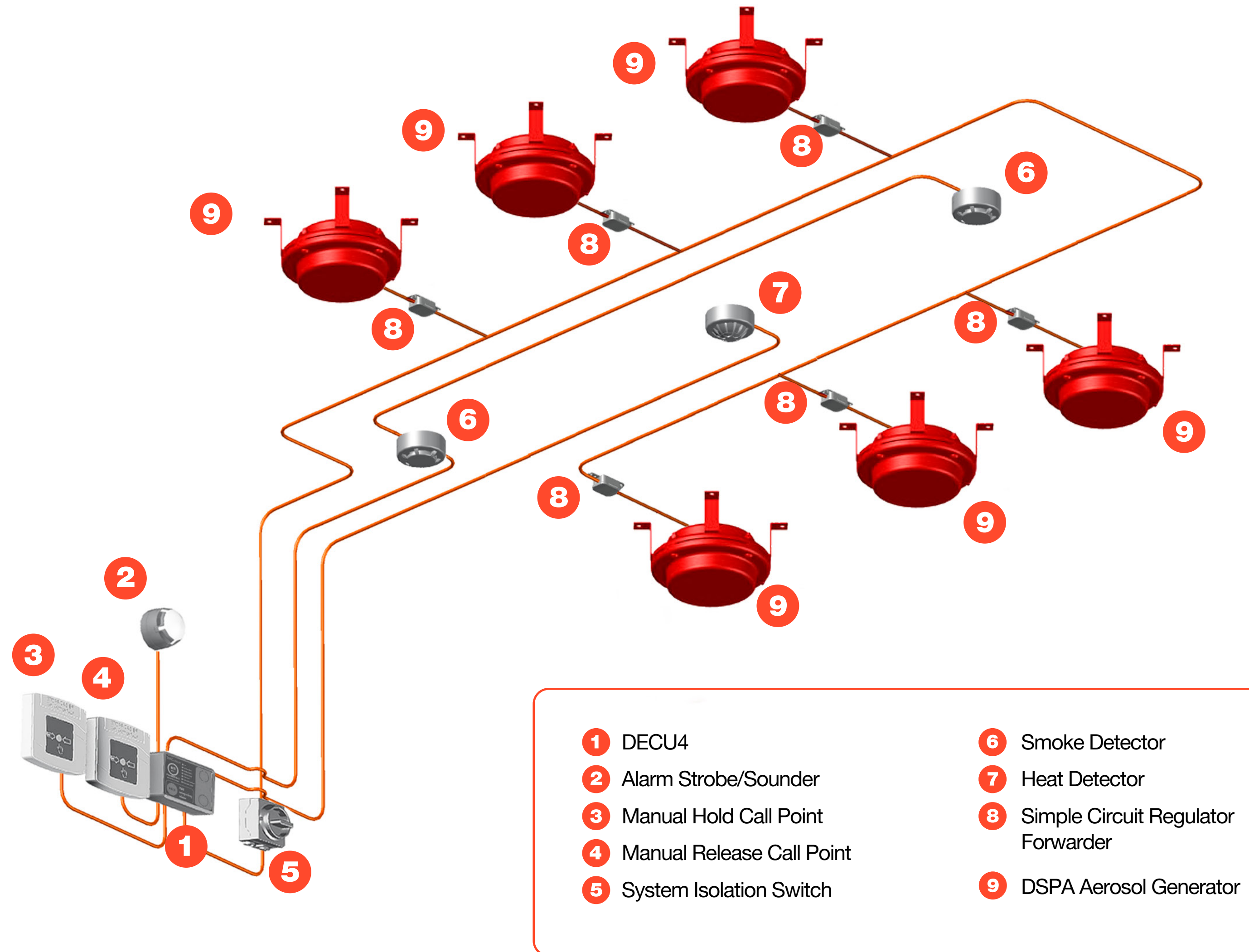
# System Integration

DSPA aerosol generators operate as part of a conventional fire detection and control architecture. The system can be connected to conventional fire alarm control panels (FACP) and activated by smoke, heat or other detection technologies according to project requirements.

**Designed for electrical and energy infrastructure, the activation concept supports distributed protection layouts while maintaining a single control logic.**

## Key integration characteristics

- Standard detection compatibility
- Multiple generators activation concept
- Scalable system architecture





Learn more about  
DSPA Aerosol Fire Suppression  
systems at [www.dspa.nl](http://www.dspa.nl)