

Spark Extinguishing System

ALF-NANO

Compact Spark Detection & Extinguishing System

A local protection solution for production lines with risk of sparks, embers, or hot spots.

- Protection for up to 2 areas, each with 2 detectors and 2 extinguishing units.
- Plug-and-play technology with pre-configured system logic for easy integration into existing lines.
- Monitoring of detectors, valves, wiring, extinguishing water, and related safety devices.
- Safety event logging to support maintenance, inspection, and operational traceability.
- Suitable for individual machines, small production areas, conveyors, and retrofit projects in space-constrained installations.



Illustrative components: detector, extinguishing units, and system accessories.

Product Overview

EWS ALF-NANO belongs to the ALF product family of Electronic Wood Systems. It is developed according to the design principles of ALF-9000 and optimized for small applications. The system focuses on three goals: fast spark detection, reliable extinguishing, and simple deployment at the plant.

Product	Function	Main Configuration	Value for Use	Application
EWS ALF-NANO	Detects and extinguishes sparks at localized fire and explosion risk points in production lines.	Up to 2 protection areas; 2 detectors and 2 extinguishing units for each area; additional I/O for monitoring and indication.	Reduces fire risk, protects machinery, and limits production line downtime with reasonable investment cost.	Suitable for production lines in the wood, wood-based panels, biomass, pellet, paper, agricultural, recycling industries and other industries handling combustible materials.

Key Features and Technical Highlights

Compact System Designed for small applications and local protection of individual machines or limited areas.	Plug-and-Play Integration Direct connection of detectors, extinguishing valves, and sensors; no complex manual configuration required.
Fast Commissioning Pre-configured system logic reduces installation effort and start-up time.	Internal Supervision Automatic monitoring of detectors, valves, and wiring to ensure system readiness.
Extinguishing Monitoring Monitors water flow, leakage, water supply status, and connected external safety devices.	Event Logging Stores safety-related events for later inspection and maintenance.

Suitable Installation Points

Protection Area	Purpose
Individual machines, conveyors, small work areas, transfer points, and material conveying lines.	Detect sparks early and activate extinguishing before fire spread, dust fire, or production line stoppage occurs.
Retrofit projects or space-constrained locations.	Add safety protection without major modifications to the existing line structure.