Critical Infrastructure: Modular, Micro/Edge IT Environments

Fire Protection Solutions for Critical Equipment Enclosures

Regulatory codes ensure that your most valuable asset – human life – is protected from fire. When it comes time to protect critical infrastructure that is essential to your business, Viking Integrated Safety has the right solutions and most efficient method of delivery.

Statistically, fire is recognized as a significant contributor of non-IT-related outages. Considering the remote nature, criticality, and unique dynamics of modern IT environments, an integrated automatic fire protection system is the first line of defense — to be effective, it must be appropriately chosen, applied and maintained.

Early detection, control and mitigation are crucial to the concept of critical infrastructure fire protection. Using advanced technologies and comprehensive applications, Viking Integrated Safety helps you analyze the hazard, design appropriate solutions, and map out a future plan for inspections and maintenance.

Peace of Mind for Complex Applications

Critical equipment enclosures are typically autonomous and unmanned, and situated within commercial buildings or remote stand-alone structures that house technologies critical to business continuity. A risk-based performance solution, where design and implementation of advanced technologies come together to address unique and dynamic infrastructure challenges, is essential for mitigating risk.

Viking Integrated Safety works with you to develop an effective solution which reliably detects potential events while in the incipient stages of fire development and notifies personnel while initiating automated processes. Using agents safe for the environment and equipment present, the system rapidly extinguishes at the right moment and prevents reignition and spread.

Fire Protection Solutions for Critical Equipment Enclosures

Modular, Micro/Edge Data Centers
Modular, micro/edge data centers are fully enclosed, self-contained compartments, which house IT/communication equipment that provides real-time autonomous processing of critical data for a wide array of industries.

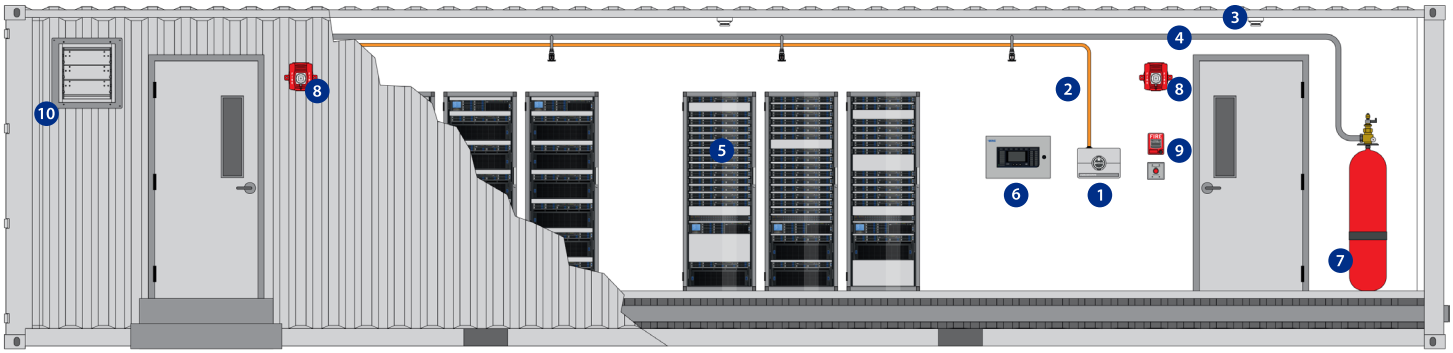
The configuration may be in the form of a small, unoccupiable equipment enclosure, or may be a much larger, pre-fabricated, occupiable structure having one or more entry/exit doors.

Typically, high heat loads will be present in densely-packed environments, requiring continuous cooling. Larger footprints may have compartments formed (such as containment aisles) to accommodate various cooling methods. Emergency power may be in the form of battery systems stored internally.

A comprehensive fire risk assessment for these enclosures considers the following factors:

- High density heat loads
- High energy densities
- High energy combustible materials
- Friction from mechanical systems
- Flammable electrolytes, oils and carbon-based fuels
- Manufacturing defects, mechanical damage and component malfunctions
- Thermal runaway

The Viking Integrated Safety Approach
We provide pre-engineered, kitted solutions tailored to meet demands of specific applications enabling. With our rapid deployment solutions and simplified procurement process, you are able to maximize consistency while reducing cost.



1. Air sampling VEWFD smoke and gas detection system
2. Air sampling pipe network with sampling holes
3. Photoelectric spot-type detectors
4. Extinguishing pipe network with nozzles
5. In-rack smoke detection and extinguishing system
6. Fire alarm and agent releasing panel
7. Extinguishing agent container
8. Notification appliances
9. Abort, manual release, lockout switches
10. Overpressure vent

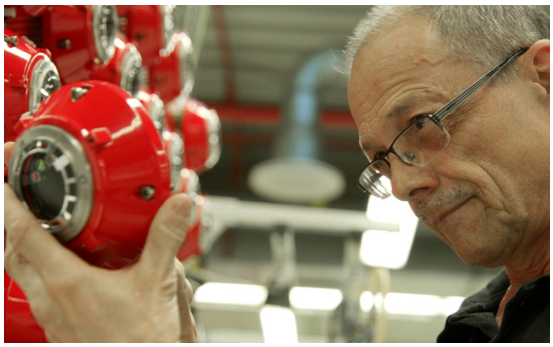
Supported Products

Count on Viking Integrated Safety to provide industry-leading quality and innovation for your fire protection challenges. You can rely on us to deliver:

Unmatched Quality
Our reputation has been earned by focusing on continuous improvement in all elements of our business.

Product Breadth
The largest selection of fire protection products available from Viking SupplyNet ensures single-point solutions for any fire protection challenge.

Integrated Safety Solutions
Design-based & code compliant safety solutions with full understanding of application protection challenges for solution perfection.



Product Information

Fire Detection Systems and Suppression Control
Conventional Panels
Addressable Panels

Automatic Detection Systems
Air Sampling Smoke Detection
Photoelectric Spot-Type Smoke Detection
Gas Detection
Univario Industrial Flame Detection
Univario Industrial Heat Detection

Water-Based Fire Suppression Systems
Fire Sprinklers
Valves and Systems

Gas-Based Suppression Systems
VSH 1230 Halocarbon
VSH 200 Halocarbon
Viking Oxeo Nitrogen
Viking Oxeo Argon

Foam Suppression Systems
Foam Bladder Tanks
Proportioning Devices
Foam Concentrate
Discharge Devices

Portable Extinguishers
ABC Multi-Purpose
BC Carbon Dioxide

Pre-Packed Suppression Systems
FireFlex Dual (VSH 1230 + Pre-action)
VSH 200 Halocarbon

Peripheral Devices
Audio/Visual Alarm
Manual Stations

OneU Fire Protection Systems
OneU rack mounted Air Sampling and Suppression
OneU DD rack mounted Air Sampling Smoke Detection
OneU ED rack mounted Suppression

For product details, visit vikinggroupinc.com/products.