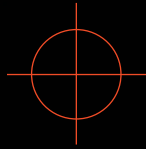




SITE

SPECIFIC



PROTECTING

YOUR

MICRO-ENVIRONMENT

**SERVER AND
TELECOMMUNICATION ENCLOSURE
FIRE PROTECTION SOLUTIONS**



FIRETRACE[®]
AUTOMATIC FIRE SUPPRESSION SYSTEMS

Computer systems have evolved. Components that once filled large rooms now reside in a rack of equipment.

Given the value of your data and equipment, shouldn't your fire protection evolve too?



Firetrace does not occupy valuable rack space. This red Firetrace Detection Tubing is run unobtrusively across the top of the rack.



The red Firetrace Detection Tubing can be located in the rack in a manner that does not interfere with installation or maintenance of the equipment.

Requirements versus realities

Most local authorities simply require building sprinkler systems throughout the building, including data centers. While water can be effective in fighting fire and saving a building, it can be devastating to computers. As a result, many centers have been equipped with, and some even require, non-water-based supplemental suppression.

The way it was

In the 1980's, the state-of-the-art in computer room fire suppression involved large Halon "Total Flood" systems that filled an entire room with gas upon detection of a fire. While these systems were very effective, the cost of the discharge was very expensive due to the amount of agent. In addition, questions surfaced regarding the environmental effects of Halon and many systems have been taken out of service either due to local regulations or by choice.

To replace Halon, new agents have been developed to protect this critical equipment. These clean agents share the best properties of Halon - effective fire suppression, non-corrosiveness or conductivity, and no clean up required in the event of a discharge.

The problem

Where computer systems once occupied large open rooms, most equipment is now installed in enclosed or semi-enclosed racks - many of which have even added options such as cooling systems built into the racks. Yet even in these new environments, shorts and power supply failures can start fires that can quickly sweep through a rack taking valuable equipment - and irreplaceable data - with it.

The solution: Fire detection and suppression in the rack

Firetrace®'s unique fire detection and suppression systems are the leading solution for rack-level fire suppression. Using our completely pneumatic Firetrace Detection Tubing, and clean fire suppression agents such as FM-200 which do not harm sensitive electronics, Firetrace can quickly detect and suppress a fire before it can spread to adjacent equipment or activate the sprinkler system.

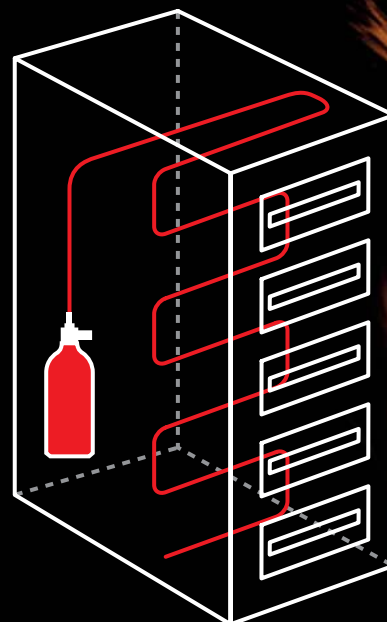
How it works

Firetrace offers two distinct fire suppression systems to suit the needs of the environment.

Firetrace Direct System

The Firetrace Direct Low-Pressure System provides simple, reliable protection for critical assets. During the installation, the red Firetrace Detection Tubing (FDT) is run into and throughout the rack, ensuring that detection is close at hand should a fire start. Should a fire break out, the point on the pressurized FDT nearest the heat source will burst, allowing the fire suppression agent to flow from the Firetrace cylinder through the tubing, and out of the rupture hole directly at the source of the fire. The result is a long discharge of agent in the immediate vicinity of the fire, suppressing the fire where it starts.

Firetrace Direct Systems can also be used in cable runs and trays. Each system can protect up to a total of 100 linear feet of cabling. Direct systems are fully automatic and cannot be manually activated.



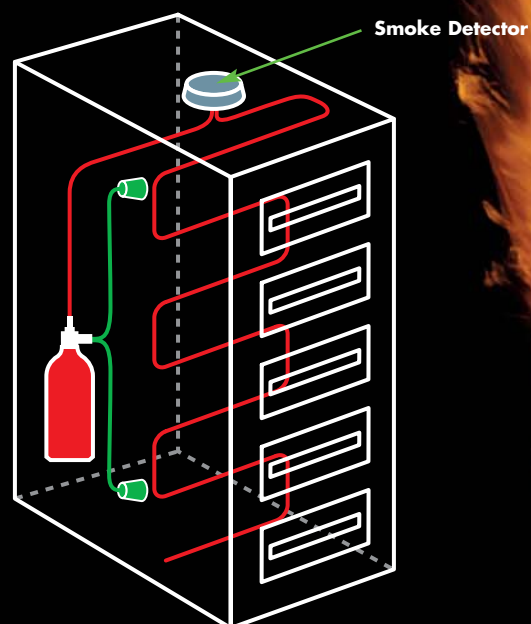
 Firetrace Detection Tubing

Firetrace Indirect System

The Firetrace Indirect Low-Pressure System uses the same red Firetrace Detection Tubing run throughout the rack's components to quickly detect a fire. When the tubing ruptures, the system activates delivering the agent through separate piping, quickly filling the rack enclosure with agent and suppressing the fire.

Firetrace Indirect Systems also offer the option to activate via a smoke detector or external alarm system (using the Firetrace Solenoid Valve) or via a manual release.

Regardless of the system selected, the Firetrace Detection Tubing is the reliable solution for detecting fire at its source quickly, before adjacent equipment can be damaged. Either Firetrace system can utilize one of a variety of clean fire suppressing agents, selected specifically to suit the environment.



 Firetrace Detection Tubing
 Indirect System Nozzle

Firetrace's Server and Telecommunication Equipment Applications

Firetrace has more than 35,000 systems installed protecting critical equipment worldwide. Firetrace has its origins in the late 1980's in the United Kingdom as a special hazard fire suppression system. Through the 1990's applications expanded to include enclosures such as machines, fume hoods, data centers and electrical cabinets as distribution increased in Europe.

In 2001, the worldwide rights to Firetrace were purchased by Firetrace USA, a group of fire suppression industry veterans who saw the value in creating fire suppression systems for "micro-environments". This concept is simply providing supplemental protection that suppresses fire quickly within the protected space before larger room or building systems would activate. As a result of this supplemental protection, fire damage, both direct and collateral, and costs associated with cleanup and downtime are significantly reduced or eliminated. Available in multiple system sizes (ranging from one pound systems to 50 pound systems)

utilizing a variety of fire suppressing agent options, Firetrace is now the choice fire suppressing system for virtually any enclosed application, including server racks and closets.

Firetrace can be fitted in virtually any rack, new or existing.

- Fast, reliable fire detection
- Clean agents that are safe for people, equipment and the environment — no cleanup required
- Installs in new or existing racks
- Doesn't interfere with installation or maintenance of equipment

FIRETRACE[®]
AUTOMATIC FIRE SUPPRESSION SYSTEMS

Distributor:

Firetrace is available exclusively through our worldwide distributors, each of which has been properly trained in the installation and maintenance of Firetrace systems. To locate the Firetrace distributor nearest you please contact us at:

Firetrace International

15678 N. Greenway-Hayden Loop, Suite 103
Scottsdale, AZ 85260 USA

1-866-607-1218 (US and Canada)

1-480-607-1218 (Elsewhere)

1-480-315-1316 (Fax)

Firetrace@firetrace.com

www.firetrace.com

Firetrace has more than 20 international approvals and listings including:



Approvals and listings vary by system type and agent.