



FIRETRACE[®]
AUTOMATIC FIRE SUPPRESSION SYSTEMS

**SERVER AND
TELECOMMUNICATION ENCLOSURES**

Fire Protection Solutions



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



The flexible red Firetrace Detection Tubing will quickly and reliably detect and suppress a fire at its source.

THE PROBLEM

The risk of a fire is very real in today's hot-running and overcrowded server racks and closets. A minor server fire can cost a company tens of thousands of dollars in lost revenues and productivity; a catastrophic server fire can bankrupt a business. Statistics show that half of all businesses that lose their data from a fire or other disaster file for bankruptcy almost immediately; and more than 90 percent of companies that lose their data for 10 days or more close their doors within one year.

Typical Causes of Fire:

- Faulty electrical connections
- Malfunctioning power supplies
- Intermittent electrical arcing
- Short circuits
- Power line surges

To combat the threat of server and telecommunications equipment fires, some local authorities require the installation of an overhead automatic sprinkler system. While water is effective for fighting fires and saving property, it can destroy computer equipment and corrupt data. In many cases the collateral damage from water sprinklers is far more destructive than the fire itself.

As a result, tens of thousands of business owners have chosen to protect their computer servers and data with "clean agent" fire detection and suppression systems. Given the value of your computer data and equipment, shouldn't you protect yourself with Firetrace?

FIRETRACE ADVANTAGES:

- ✦ Fast, reliable fire protection without the damaging side-effects of water
- ✦ Suppresses a fire in seconds, reducing equipment damage and downtime
- ✦ Easy to install in any new or existing server rack or closet and requires no power to operate
- ✦ Clean suppression agents require no post-discharge cleanup
- ✦ Will not harm people, equipment or the environment
- ✦ System options expand peripheral capabilities
- ✦ Clean agents will not harm electronic equipment or magnetic media and are OK to use on energized equipment
- ✦ Does not interfere with installation or maintenance of equipment
- ✦ Meets NFPA 75 requirements for computer installations needing fire protection

THE FIRETRACE SOLUTION

Firetrace automatic fire detection and suppression systems are the industry leading solution for protecting server racks and telecommunications equipment. And Firetrace now offers Total Flooding Systems that can effectively protect entire server and telecommunications rooms without the collateral damage caused by water sprinklers.

Using our unique, pneumatic Firetrace Detection Tubing (FDT), and "clean" fire extinguishing agents such as DuPont™ FM-200® and 3M™ Novec™ 1230 Fluid, a Firetrace system will quickly and reliably detect and suppress a fire before it can spread to adjacent equipment or activate an overhead sprinkler system. And Firetrace Total Flooding Systems provide a second line of defense for those fires originating outside of the server rack, further reducing or eliminating the risk of equipment damage and downtime.

The two system types complement one another by protecting those areas with an elevated fire risk with a small system that can be easily and inexpensively installed and recharged, and a second larger system that provides complete room protection that will stop fires no matter where they start.

HOW IT WORKS

Firetrace has a system that is right for you

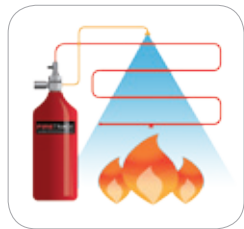
For protection of server racks, server closets, and server rooms, Firetrace offers three self-actuating fire extinguishing systems to meet your specific needs.



Firetrace Direct System

The Firetrace Direct Low Pressure System provides a simple and reliable fire protection solution for open and semi-enclosed server racks. The Direct system utilizes pressurized Firetrace Detection Tubing as both a fire detecting sensor and extinguishment delivery device. The flexible red Detection Tubing can be routed throughout a server rack, ensuring detection and suppression of a fire right at its source. The tubing is designed to burst at the point of highest heat, forming an effective discharge “nozzle.”

Firetrace Direct Systems are also ideal for protecting cable runs and trays. One system can be configured to protect up to a total of 100 linear feet of cabling. Direct systems can be fitted with an optional pressure switch to shut down electrical equipment or activate local or building alarms.



Firetrace Indirect System

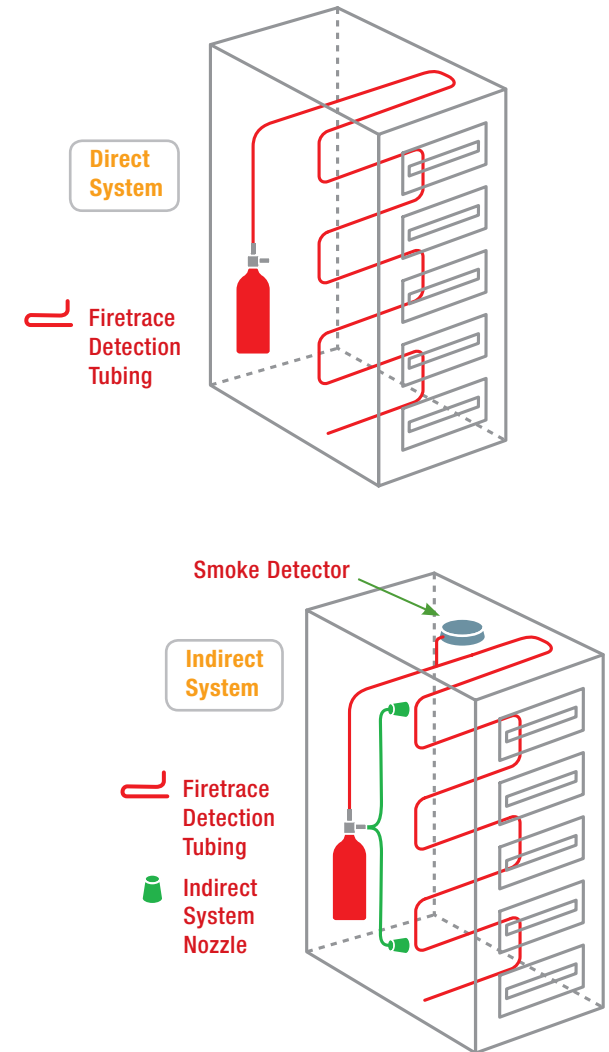
The Firetrace Indirect Low Pressure System provides a simple and reliable fire protection solution for fully-enclosed server racks and closets. In contrast to the Direct system, the Indirect system uses the pressurized red Firetrace Detection Tubing as a detection-only device. When the tubing ruptures, it triggers the release of the extinguishing agent through separate network of hoses or piping to one or more dispersion nozzles that flood the enclosure with suppressing agent quickly and completely.

Firetrace Indirect Systems also offer the option to activate via a smoke detector. Indirect Systems can be fitted with an optional pressure switch to trigger an external alarm or shut down system power. Although designed to activate automatically, Indirect systems can also be activated with an optional manual release.

Regardless of the system selected, the Firetrace Detection Tubing is the reliable solution for detecting a fire at its source before business-critical equipment and assets can be damaged.

Firetrace Total Room Flooding System

Firetrace Total Flooding systems quickly fill a room to a specific concentration with fire suppressing clean agent gas. Once this concentration is achieved, a fire will be effectively suppressed. Like agents used in other Firetrace systems, the gas will not harm people or equipment and does not require cleanup or leave any residue.





Firetrace Server and Telecommunication Equipment Applications

Firetrace has more than 150,000 systems installed protecting business critical server and telecommunications 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, 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) and utilizing a variety of fire suppressing agent options, Firetrace is the fire suppressing system of choice for virtually any enclosed server application, from a single server rack to an entire data center.

Whether you are replacing an old Halon system or protecting your equipment for the first time, Firetrace provides a reliable and cost-effective solution.



Firetrace currently has more than 20 international approvals and listings, including: UL, CE, FM, ULC & ISO9001. Approvals and listings vary by system type and agent.