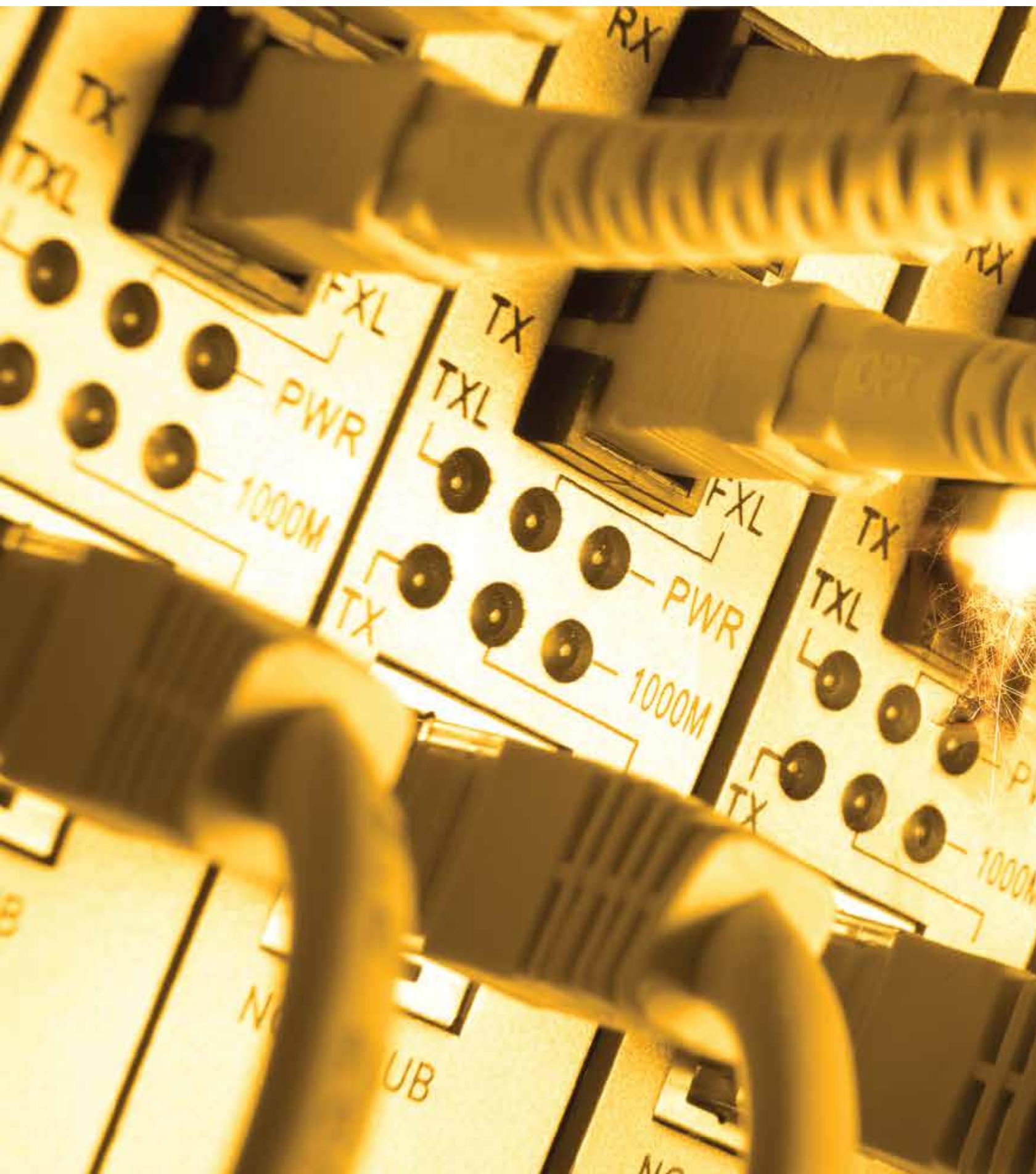




**THE NEW AGE  
FIRE PROTECTION  
FOR SERVERS.  
CEASEFIRE SQRS.**



**CEASEFIRE SERVER QUICK  
RESPONSE SYSTEM**





# SERVER ROOMS AND DATA CENTRES ARE ALWAYS VULNERABLE.

High-end servers, wiring, complicated circuitry... Server rooms and data centres are always vulnerable. An overload or system shutdown could easily cause an energy imbalance that result in a sudden blaze – within minutes. While existing firefighting systems secure the whole room, these systems are not designed to protect your equipment, thereby bringing everything to a standstill. Causing loss of vital information, loss of reputation, loss of money spent to replace damaged servers, downtime, and sometimes, a full shutdown.

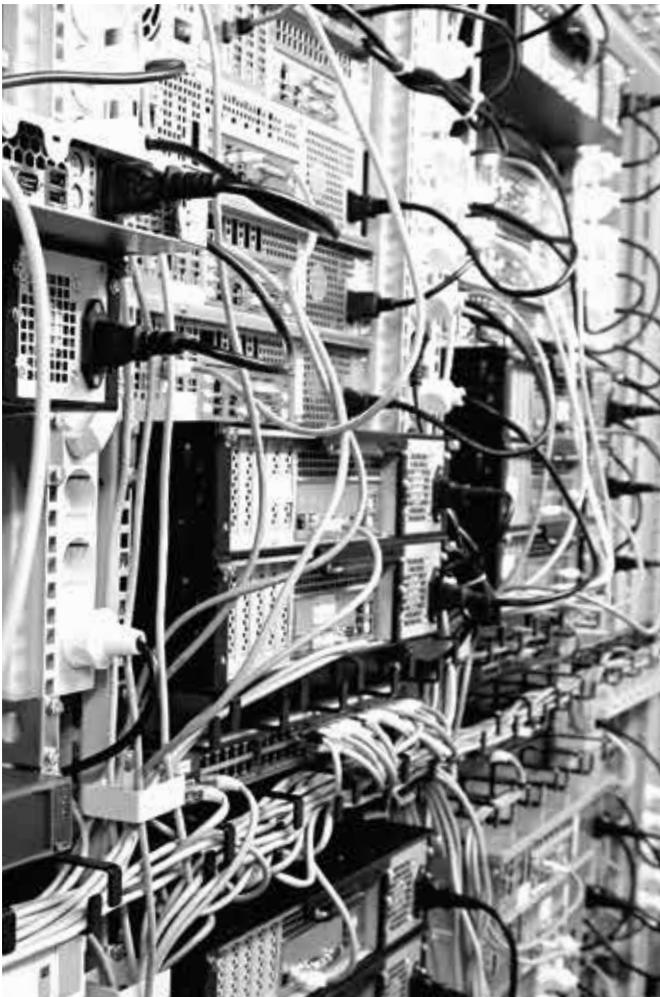
Room systems on the other hand are also not a possible option when server racks are placed in areas inhabited by the staff. This is particularly true in case of smaller offices with limited space.

The need of the hour is a system that works in a contained space of a server. One that swiftly gets into action, effectively putting out the smallest trace of fire in a server rack without causing any damage to the server.

**That's where the Ceasefire SQRS (Server Quick Response System) comes in. It combines the effectiveness of small area surveillance with the power of a suppressant system.**

SQRS is powered by HFC 227ea as its extinguishing agent which is the cleanest extinguishing agent known to man, and is a fully automated and independent suppression system for an individual server. This system is designed and equipped to slot into your existing server racks, and quell fire within seconds of being detected. SQRS is specially created to safeguard valuable equipment as it activates within seconds of detection and does not allow fire the time to damage the equipment.

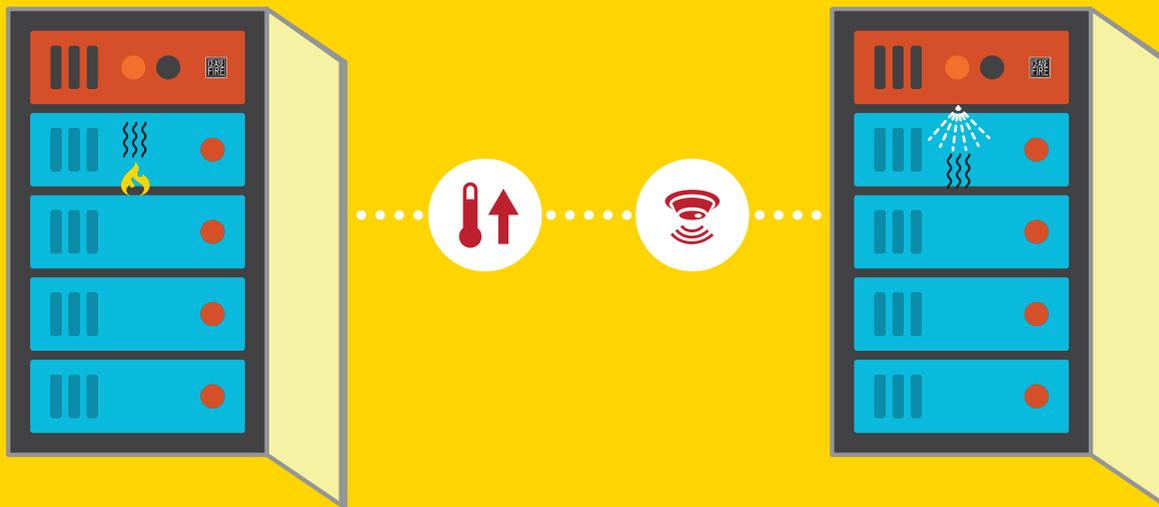
What's more, since HFC 227ea is a completely clean, gas-based extinguishing agent, it ensures that the fire is put out without causing any collateral damage to the server. HFC 227ea's Zero ODP makes it absolutely safe for the environment too.



# THE SERVER-READY CEASEFIRE SQRS.

Servers are at the heart of data centres and large organisations. Not just for these companies but for hundreds of their clients' businesses. Keeping this in mind, the Ceasefire SQRS has been specifically built to the specifications of a server rack. Which means it concentrates on protecting the server itself, rather than the macro

environment around it. It is designed to protect the server against damages due to fire and not just to stop the fire. Power of this system is in its speed of detection and activation which does not allow fire the time to grow and damage anything. Here's how it works.



The Ceasefire SQRS is installed within the micro environment of a server rack. When the detectors sense a rise in temperature above normal levels, or particles of smoke or a change in the quality of air in the contained server space, the detectors activate the system and the extinguishing agent

(HFC 227ea) is discharged. As it activates, a hooter goes off, warning personnel about the fire. All components of the system including the detectors, controls, extinguishing agent cylinders and alarm devices are all packed together as one compact modular unit.

For high air flow server racks the system comes with a Highly Sensitive Smoke detection option. The optional IP Module gives the user the power to monitor the health of the system through web on a computer or a smart phone and receive email alerts and alarms in case of emergencies.

80% of HFC 227ea's firefighting effectiveness is achieved through heat absorption and 20% through direct chemical means (action of the fluorine radical on the chain reaction of a flame). Harnessing the latest in cutting-edge firefighting technology, this system has been specially designed for server racks in data centres and server rooms. This system requires no monitoring what-so-ever and activates instantly in the

event of a fire. Being self-activated, the system offers protection from fire 24x7, whether anyone's around or not.

Since each rack can hold an independent Ceasefire SQRS, it can be easily converted into a large system when more than one server rack needs to be protected. The modular nature of the system brings scalability together with the effectiveness of micro environment protection.

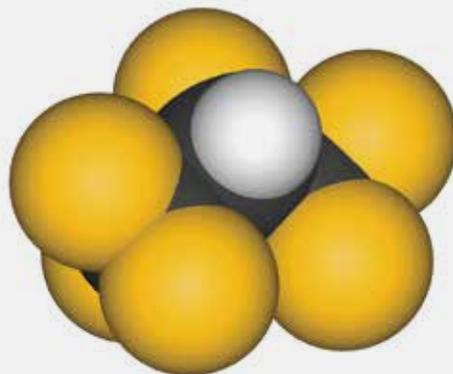
Ensuring protection against fire, and protection for your expensive equipment.

# INTRODUCING HFC 227ea

HFC 227ea, known chemically as Heptafluoropropane, is a colourless, odourless gas that is liquefied under pressure for storage. It is thermally and chemically stable, but without the extremely long atmospheric lifetimes associated with other proposed Halon replacements. HFC 227ea has been specially created to suppress fire by reaching extinguishing levels in seconds, reducing the oxygen supply to below combustion levels and stopping ordinary, electrical, and flammable liquid fires before they cause significant damage. That's the fastest fire protection available, period! This also means less damage, less downtime and an extra margin of safety.

Not only does HFC 227ea put out fires in a very short period of time, it leaves no residue or oily deposits on delicate electronic equipment, and can be removed from the protected space by only ventilation

## HFC 227ea: The Approved Option



The Montreal Protocol provided the phase out and phase down of all Ozone depleting substances such as Halon (phased out) and HCFC (being phased out). Not only is HFC 227ea the approved extinguishing agent, it's also the most effective one.

# THE COMPLETE CEASEFIRE SQRS SYSTEM

The System comprises of various components coming together to create an unbeatable system for server racks.

## 1 Agent Tank

An essential component of the system, these high pressure tanks are placed in the server rack. Depending upon the requirement, single or two containers are installed.

## 2 Nozzles

The extinguishing agent is dispersed through the brass discharge nozzle. These nozzles are designed specially for the server rack.

## 3 Detection Devices

Ceasefire uses accurate and reliable Point Type Detectors, built-in with the option for remote detection for further coverage. Also available is the High Sensitive Smoke Aspirating Detection (HSSD) for mission critical applications.

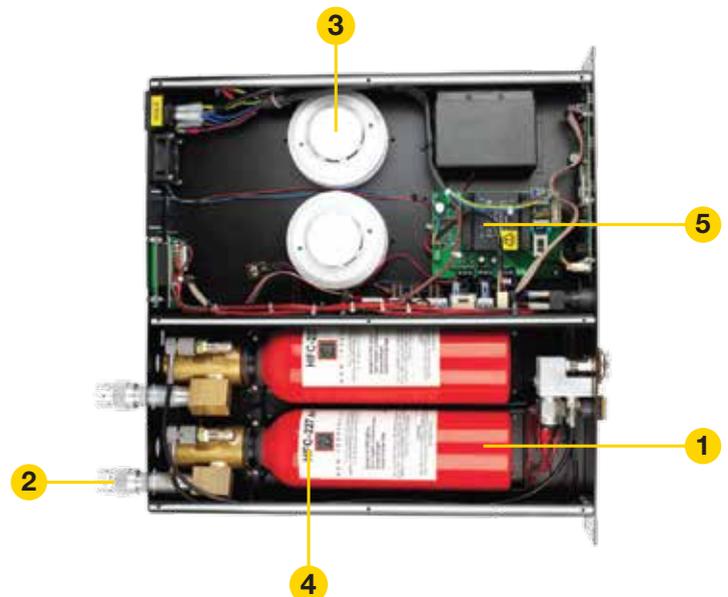
## 4 Extinguishing Agent

The SQRS is powered by HFC 227ea, a gas that has zero Ozone Depletion Potential and is environmentally friendly. The containers are each capable of protecting a volume of 1.5m<sup>3</sup>.

## 5 Control

The SQRS is designed to suit a range of applications, whether 19" rack mounted or otherwise. Each system is a complete fire detection and suppression solution, managed by an internal controller.

Designed to comply with recognised fire detection and control design standards, the SQRS includes fully supervised detection and release circuits, as well as options to abort or hold, and low pressure and gas released inputs and outputs. A volt free change over contacts allows easy integration into Building Fire Alarm and BMS Systems.



# THE BENEFITS OF THE CEASEFIRE SQRS SYSTEM



## Classification

Works on class A, B, C fires and fires involving electrically charged devices. Effective on a wide range of flammable and combustible materials.



## Electronics Friendly

Shown to be electrically non-conductive and is safe for electrically charged equipment, it is kinder on electronics than the majority of extinguishing agents available in the market.



## Ozone, Environmentally Friendly

Being clean-agent this is an eco-friendly alternative to chemical and water-based extinguishing systems. Its atmospheric lifetime is minimal.



## Superior to Other Gas Agents

HFC 227ea is superior to other gas-based extinguishing agents that have higher boiling points and tend to be corrosive.



## High-value Risk Protection

Suitable for protection on a range of high value risks as it virtually eliminates damage to high value server racks.



## No Clean-up Required After Discharge

After a discharge, the extinguishing agent can be removed by simple ventilation.



## 24-hour Protection

Automatic detection and actuation controls ensure fire protection is always 'on'.



### Multiple Triggers

The system can be triggered either by the manual actuation system or through the automatic detection system.



### Speedy Deployment, Minimal Downtime

Deploys quickly reaching extinguishing levels in 10 seconds or less, stopping ordinary combustible, electrical, and flammable liquid fires before they cause significant damage. When fire is extinguished this quickly, it means less damage, lower repair costs, and an extra margin of safety for people. It also means less downtime and disruption of business.



### Highly Effective

Not only does HFC 227ea work in 10 seconds, it prevents re-ignition by rapidly cooling down temperatures in the surrounding area.



### Highly Reliable

A fully assembled and 100% tested mechanical control head ensures reliable operation. A pressure gauge on the steel cylinders marks the gas levels so maintenance staff can replenish it whenever required. Protective chrome nozzle covers keep nozzles free from contamination and blockage by grease or other by-products that can inhibit the proper discharge of the extinguishing agent.



### Globally Utilised

HFC 227ea is the only globally accepted flooding system gas and is in use in over one hundred thousand applications, in more than 70 countries.



### Residue-free

Being clean agent it won't leave behind oily residue, particulate or corrosive material.



### Superior Quality

HFC 227ea is manufactured by DuPont™, a 208-year old science and technology company that is renowned for its high-quality operations 70 countries.



### Unobtrusive Design

Flexible piping configurations allow for a streamlined design and convenient installation that will not interfere with office workflow.



### Highly Flexible

Available in a variety of sizes that can be customised as per the application. Its flexible configuration and design can easily accommodate changes to the layout or expansion of the area.



### IP Module:

The optional IP Module gives the user the power to monitor the health of the system through web on a computer or a smart phone and receive email alerts and alarms in case of emergencies.



## FEATURES

 Fights Class A, B, C, E and Class F Fires
 Electronics Friendly
 Environmentally Friendly
 HFC 227ea Superior to Other Gas Agents
 High-value Risk Protection
 No Clean-up Required After Discharge
 24-hour Protection

 Multiple Triggers
 Speedy Deployment, Minimal Downtime
 Highly Effective
 Residue-free
 Superior Quality
 Unobtrusive Design
 Highly Flexible

## TECHNICAL SPECIFICATIONS

Specification	SQRS 1.5 Zp	SQRS 1.5 Za	SQRS 3.0 Zp	SQRS 3.0 Za
1.5 m <sup>3</sup> flooding capacity	✓	✓	✗	✗
3 m <sup>3</sup> flooding capacity	✗	✗	✓	✓
Fit server racks with a depth of 600 mm	✓	✓	✓	✓
Includes point type optical smoke detection	✓	✓	✓	✓
Includes a pressure gauge, allowing you to check the cylinder pressure	✓	✓	✓	✓
Has a low gas pressure output warning	✓	✓	✓	✓
Comes with external connection for fire control coverage of additional areas	✓	✓	✓	✓
Volt-free contact outputs for 1st and 2nd stage alarms and system fault conditions	✓	✓	✓	✓
Two pressure gauges to indicate pressure in each cylinder	✗	✗	✓	✓
Selectable single activation mode	✓	✓	✓	✓
Highly Sensitive Smoke Detection for high airflow applications	✗	✓	✗	✓
Also available with optional IP Module	✗	✓	✗	✓

# CEASEFIRE DESIGN CELL:

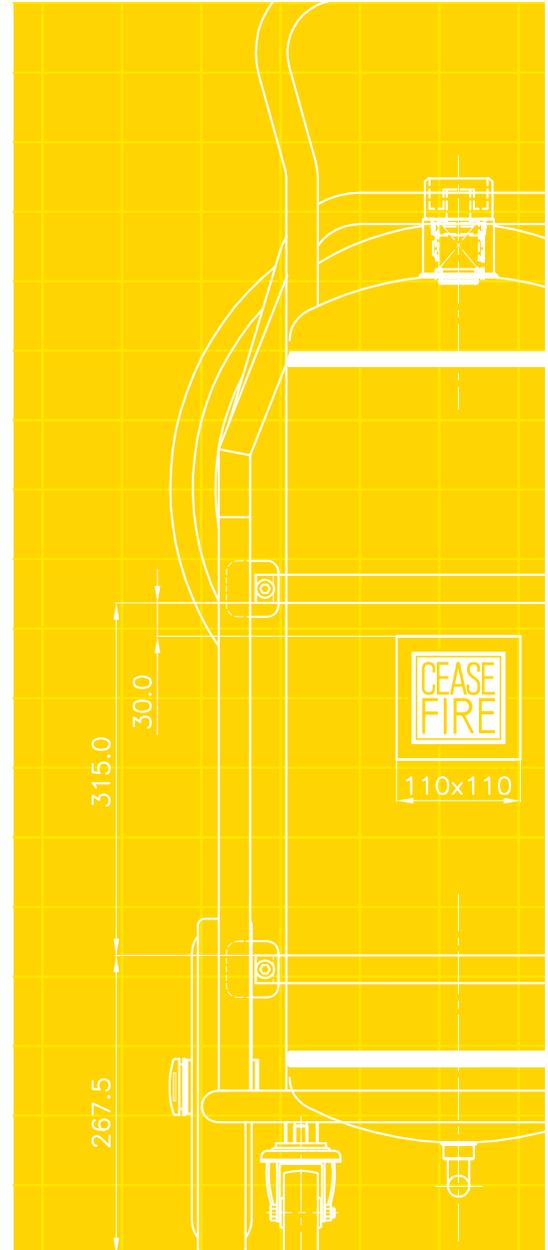
No two premises are alike. By offering the most flexible system configurations in the industry, Ceasefire provides the most efficient protection for facilities. Believing that the most effective fire solutions are the ones that are customised according to the unique characteristics of the area being protected, Ceasefire has established the Ceasefire Design Cell (CDC).

Functioning as the single touch point for all fire safety needs, CDC is manned by fire experts and managers with years of experience in fire safety under their belts. As a part of Ceasefire's 360 degree protection solution, the Ceasefire Technical Survey team visits your facility and conducts a detailed study to understand its vulnerabilities and requirements. They survey the premises and work out requirements and the number of Wheeled Watermist Based System required based on fire threats in the room.

Once it has been finalised, Ceasefire's expert Installation Team oversee installation and testing. The Ceasefire Team also trains you and your staff to use the fire safety system.

## Benefits:

- An exhaustive planning process, executed by engineers with years of experience.
- State-of-the-art solutions and products in association with world leaders.
- Design and installation of your System overseen by professionals, ensuring delivery of a high quality, reliable system.



## CEASEFIRE NOW

360° lifesaving fire and safety solutions. More than 3,000 new customers a month. A product sold every 61 seconds. A life saved every 5 minutes. Presence in over 300 cities and towns. Backed by a team of more than 2,000. 400 lifesaving products – from green fire extinguishers that can tackle any kind of fire to first of its kind automatic fire extinguisher to more advanced independent suppression systems – Ceasefire has it all. We're equipped and ready to protect your premises.

Download the Ceasefire app.



Ceasefire Industries Private Limited  
Plot No. 4, Second Floor, Sector - 135,  
Noida - Greater Noida Expressway,  
Noida - 201 301, Uttar Pradesh (India)  
t +91 120 4665800

Call our Free Hotline :  
1800 120 3473 / +91 9540 666 666  
or call +91 120 4223473

[www.ceasefire.in](http://www.ceasefire.in)

Follow us on:

