



Kidde ORION™ XT High Sensitivity Smoke Detection Systems

Early Warning Fire Detection for Critical Facilities

Early Warning Fire Detection = Less Damage = Less Downtime



It doesn't matter where a fire starts in a modern manufacturing facility. There could be an electrical short in the wiring of a robotics system, or an over-heating of a cable in the subfloor of a control room.

During the incipient stage, smoke can smolder for hours, undetected by people or conventional smoke detectors.

By the time the fire has grown from the incipient stage to that of visible smoke and intense heat, the damage is done. Irreplaceable software has been destroyed, expensive equipment burned beyond saving.

Kidde Orion XT Systems catch fire in its earliest stages. So, there's no serious downtime in your manufacturing operations, no costly interruption in your business continuity, no missed revenue, no loss of customer confidence.

Kidde Orion XT HSSD® Systems.

Thousands of Times More Sensitive Than Conventional Smoke Detectors.

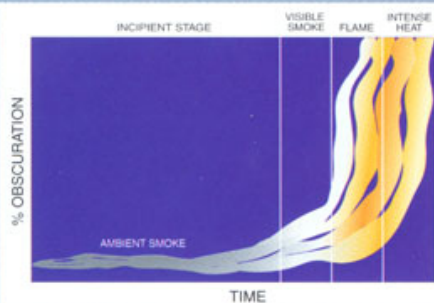
Kidde Orion XT is a laser-based air sampling system that actively draws from the protected area through a sampling pipe network and uses advanced Kidde particle-counting technology to detect even the smallest amounts of smoke during the incipient stage of the fire. But what makes this system truly amazing is that it can discriminate between particles of combustion and nuisance alarm-causing factors such as dust.

What a Kidde Orion XT System provides is an extra margin of time - minutes, not seconds - in a fire emergency. This enables facility managers to locate and deal with the source of many fires... often without having to activate fire suppression systems. Kidde Orion XT's early warning capability could be the difference between a minor inconvenience and a major fire event.

Designed for Critical Facilities

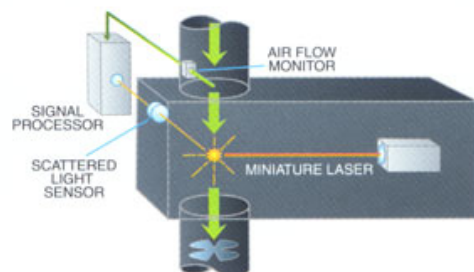
Kidde Orion XT Systems are designed for critical facilities that cannot tolerate any fire-related interruption. These types of facilities include muse-

ums, record storage, rare book libraries, process control rooms, data processing centers, warehouses, transformer vaults, motor enclosures and power generation equipment. Facilities with high airflow environments - such as computer rooms - are ideal applications for Kidde Orion XT Systems. That's because the airflow dilutes the smoke concentration, making conventional detectors less effective. The Kidde Orion XT System can detect very small amounts of smoke and therefore reacts faster than conventional smoke detectors



STAGES OF COMBUSTION

ORION XT
ADVANCED TECHNOLOGY
SMOKE DETECTION



Active Versus Passive Detection

Unlike conventional spot-type smoke detectors, a Kidde Orion XT System is constantly sniffing the air of a protected area for particles of combustion. It doesn't wait for the smoke to travel to the detector. So your Kidde Orion XT can begin detecting a fire situation minutes earlier, even when those particles of combustion are minute "plasticizers" given off by overheating electrical components. This active detection by the Kidde Orion XT System is done automatically, 24 hours a day, with or without personnel present. So your facility is never without its early warning detection capability.

Fewer Nuisance Alarms, Less Maintenance

With its particle size discrimination technology, the Kidde Orion XT System can tell the difference between ordinary dust and the particles of combustion. It ignores everything but smoke, reducing the possibility of nuisance alarms.

As opposed to other air sampling systems, your Kidde Orion XT System uses no filters to screen out particles. So there's nothing to clog up and no filters to change which reduces costly, time-consuming maintenance.

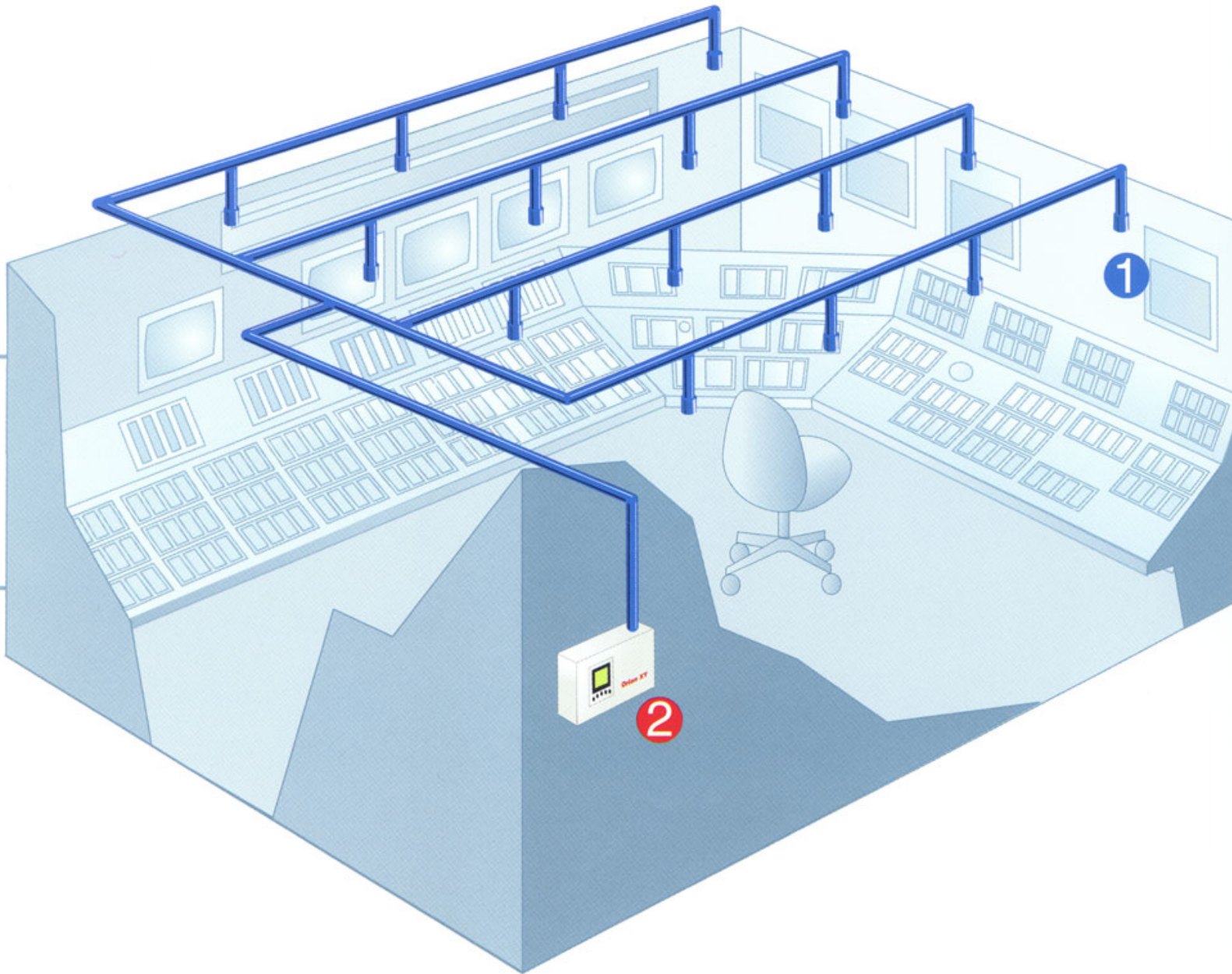
An Integral Part of Good Fire Protection

The Kidde Orion XT System doesn't replace the need for sprinkler systems (to protect the structure) or Kidde clean agent fire suppression systems (for safeguarding of critical facilities). Instead, it functions as part of an integrated fire protection system, providing an early fire warning capability essential to the uninterrupted business continuity of critical facilities.

Since many fires can be detected very early on by the Kidde Orion XT System, it minimizes the need for activating either special hazard or sprinkler systems. This action saves you both time and money by eliminating the need for after-fire cleanup and system recharging

Here's How the Kidde Orion XT System Works...

- 1** Air is drawn by a **Fan** through the **Piping Network** in the protected area into a **Detector Head**.
- 2** A **Laser-based Particle Counter** in the **Detector Head** determines the size and number of particles... recording only those particles between 10 and 0.01 microns in size (smoke). The data is processed inside the **Detector** and can be displayed on an optional **Display Module**.



Kidde Orion XT System Components

Detector – an air sampling smoke detector designed for early warning smoke detection applications. This laser-based unit employs sophisticated particle counting and size discrimination technology to detect particles of combustion at levels of obscuration as low as 0.0015%/ft. while ignoring larger particles such as dust.

Display Module – an optional backlit LCD screen that provides detector alarm and trouble status. It features an easy-to-use menu structure that enables users to access detailed detector information and perform basic detector control functions.

PEGAsys Addressable Loop Module (PALM) – an optional direct interface to a Kidde PEGAsys™ Intelligent Control Panel.

Power Supply – the Kidde Orion XT System can receive power from any one of four sources: a Kidde 120/240 Volt AC Self-Contained Power Supply with 4-hour backup for a single detector; a Kidde 120/240 Volt AC Multi-Zone Power Supply for 24-hour backup for up to eight detectors; 24 volt DC power from a fire control panel; or from any listed or approved power supply.

Kidde "SNIFF" Air Sampling Pipe Design Software – a Windows™-based application used to design air sampling pipe networks of up to 100 sampling holes for Kidde Orion XT High Sensitivity Smoke Detectors. "SNIFF" calculates optimal sampling hole sizes to provide equal sensitivity at each hole and fastest transport time for a pipe network.

Air Sampling Pipe Network – a system of pipes, designed by the Kidde "SNIFF" software, extending into the protected area and equipped with strategically placed sampling holes.

Configuration Software – a Windows-based application that allows the user to set up all operating parameters of the Kidde Orion XT Detector as well as to display up to 28 days of smoke history for use in analyzing a fire event.



The Engineering Specification

The early warning fire detection system for (INSERT HAZARD AREA DESCRIPTION) shall be a Kidde Orion XT High-Sensitivity-Smoke-Detection System. It shall provide an early warning of a fire in its incipient stage. The system shall include, but not be limited to, a detector assembly with display module; fan; power supply; and the properly designed air sampling pipe network in complete compliance with the Kidde "SNIFF" computer-aided design program.

The entire system, less the commercially-available smooth bore piping with airtight connections, shall be manufactured by Kidde Fire Systems and supplied and installed by a Kidde authorized distributor. The installation shall be in accordance with the Kidde Orion XT System design manuals 77.100 and NFPA 72.

Our Quality is Certified

Kidde Orion XT Systems are made in America in accordance with ISO 9001 certified quality standards and installed and serviced by Kidde Distributors worldwide. When you've specified "Kidde," you've chosen the world's most respected name in fire protection.



Kidde Orion XT Systems Are Available From

This literature is provided for informational purposes only. KIDDE assumes no responsibility for the product's suitability for a particular application. The product must be properly applied to work correctly. If you need more information on this product, or if you have a particular problem or question, contact KIDDE, Ashland, MA 01721: Tel: (508) 881-2000.

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