

# CASE STUDY



## NOTIFIER provides Chicago data centers with very early fire detection solution.

### QUICK FACTS

- › **Project:** Installation of smoke detection / alarm system
- › **Customer:** Large multinational operator of full-stack data centers
- › **Location/Facility:** Itasca, Illinois (Chicago metro area) Two new data storage/processing centers providing 72 MW of total critical IT load
- › **Solution:** NOTIFIER alarm control panels integrated with VESDA-E smoke detection systems

**BACKGROUND** Data centers have become drivers of economic vitality worldwide – yet most people don't even think about them until they go down. When they do, airlines are forced to cancel flights, hospitals can't access patients' records and employees can't pass through access-controlled doors at work. Fires pose a serious threat to data centers: smoke can go undetected in confined spaces, allowing a fire to develop and spread quickly, putting employees in danger while destroying expensive hardware and irreplaceable data.

Electrical systems can present a risk if they malfunction, overload or degrade over time – particularly the racks of lithium-ion batteries that provide uninterruptible power. Risks can also stem from malfunctioning mechanics, such as the HVAC system or generator, or from uncontrollable environmental factors. A state-of-the-art smoke detection and alarm system is therefore critical to protect human life, client trust and the operator's hard-earned reputation.

**CHALLENGE** When one of the world's largest operators of full-stack data centers expanded its America operations into the Chicago metro area, the company knew what it wanted: very-early smoke detection and alarm notification systems for its two new data centers that were fully integrated up front. These would enable full functionality and data access right at the panel, while avoiding the added costs and potential failure points of trying to integrate disparate systems – a dedicated PC, a high-level interface and extra relays.

From past experience, the data center owner's team also knew it wanted control panels with graphical user interfaces (GUIs) to make it easier for operators to read data, adjust settings and spot potential maintenance issues. Additionally, GUIs would show first-responders the precise location of a fire, should one develop, and at the macro level, enable visibility into system performance from corporate-level panels at the company's national headquarters in Sacramento. Above all, the data center owner considered it essential to maintain uniformity with fire systems across its U.S. facilities, especially given its plans for additional U.S. expansion.

“Our data center customer was specifically looking for a system that was easy to use, simple to maintain, less intrusive for annual testing and would enable full functionality and data access right at the fire panel. We knew NOTIFIER was the obvious solution.

Rene Garcia, President  
Chicago Fire Detection Systems, LLC



## Solution

The data center owner selected NOTIFIER by Honeywell alarm control panels and VESDA-E aspirating smoke-detection systems to provide fully integrated fire detection and notification at its two new Itasca, Illinois, facilities. The company had previously chosen this solution for all its U.S. facilities, having determined that it would provide the earliest possible detection and notification to protect its employees and client data.

Another consideration factored into the customer's choice: NOTIFIER's network of approximately 500 engineered systems distributors (ESDs), which install, service and maintain NOTIFIER and VESDA systems. NOTIFIER arranged to have Chicago Fire Detection Systems, an ESD in the greater Chicago area, meet with the data center owner's team to draw up plans and schedule the Itasca installations.

## Benefits

- › VESDA aspirating technology proactively samples air to provide earliest possible detection, eliminating non-detections caused by stratification or confined spaces.
- › Upfront integration of control panel with smoke detection system enables full functionality/visibility at the panel, eliminates potential failure points and added costs of dedicated PC, high-level interface and relays required with disparate systems.
- › NOTIFIER's graphical user interface (GUI) makes it easy for operators to read data, adjust settings and spot potential maintenance issues.
- › GUI also allows full corporate-level visibility into system performance and shows first-responders earliest possible location of detected smoke in the event of a fire.
- › NOTIFIER's network of factory-trained and certified engineered system distributors provide expert installation and maintenance and a localized commitment to customer safety and service.

## About the Distributor

Chicago Fire Detection Systems is an award-winning engineered systems distributor of NOTIFIER by Honeywell solutions serving the greater Chicago-area market since 2011. CFDS claims a combined experience of well over 100 years and welcomes any scope of work, no matter how large or small.

The company provides fire, voice and networked systems to the largest high-rise buildings downtown, the smallest daycare centers in the suburbs and everything in between. CFDS proudly employs NICET-certified personnel with Level I to Level IV certifications and is City of Chicago MBE/DBE/ACDBE-certified and an Illinois-licensed alarm contractor.

## NOTIFIER

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