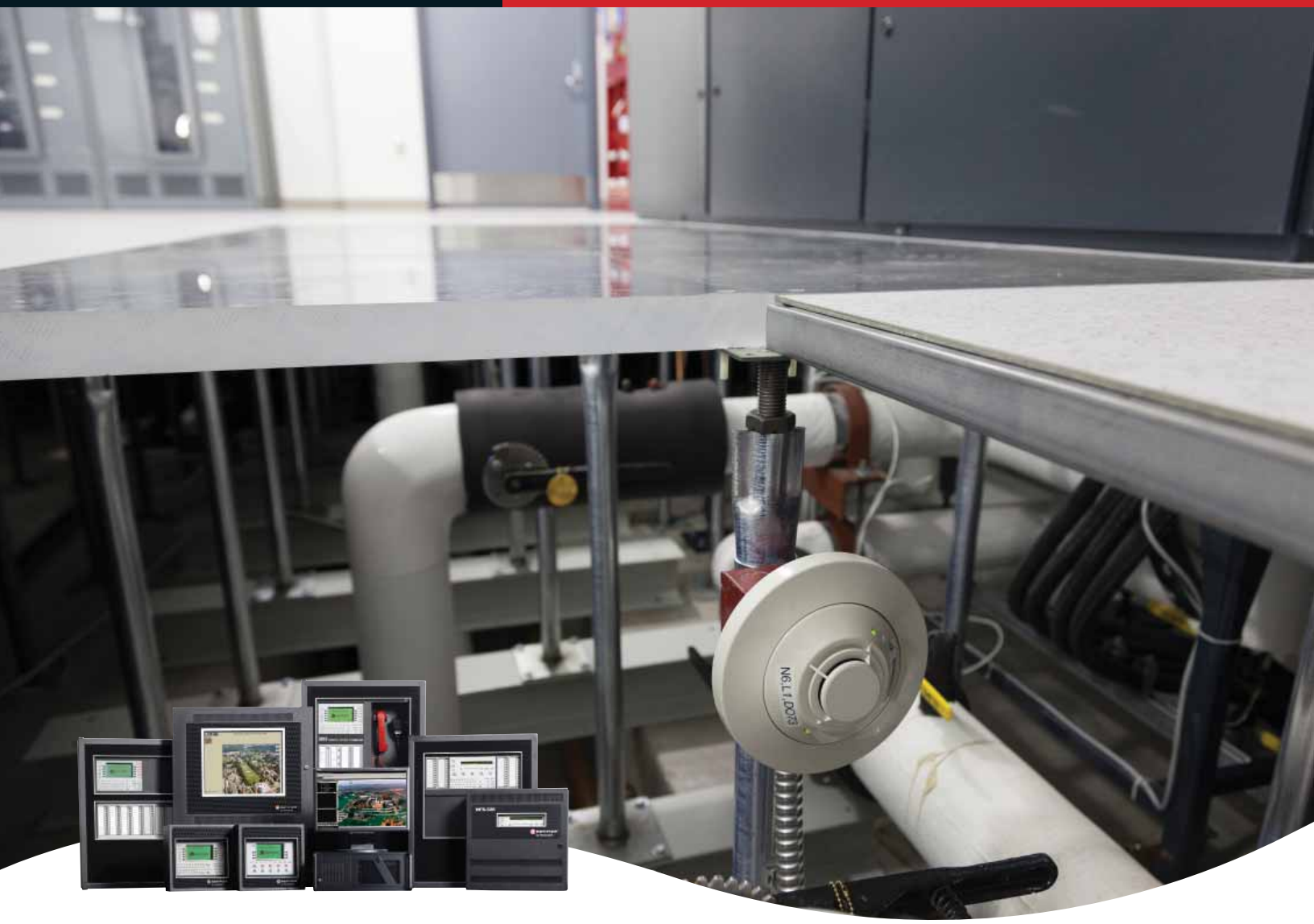
Project Profile SC1 Data Center



FAIL SAFE FIRE ALARM SYSTEM FOR SILICON VALLEY'S LARGEST DATA CENTER

Thanks to the procurement and programming skill of Intrepid Electronic Systems, it doesn't get any more fire-resistant in a data center than the fire alarm at the SC1 Data Center in Santa Clara, California.

The SC1 fire alarm system, installed by Cupertino Electric, Inc., offers four levels of redundancy throughout the data center and monitors 2,700 devices in Phase One, protecting the 360,000 square-foot facility with a number of ultra safe options.

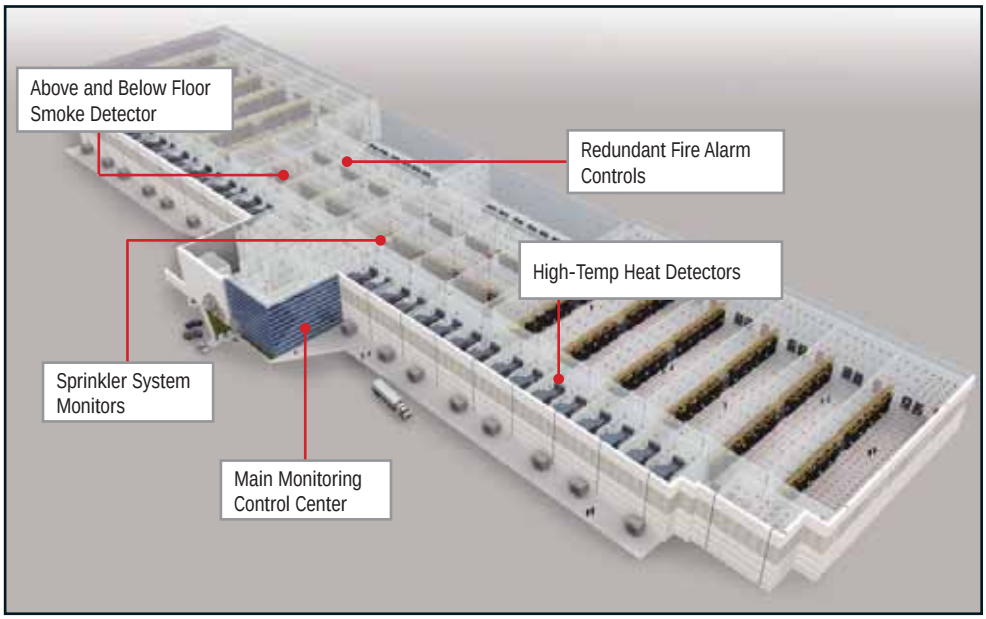
The fire alarm system includes both laser based incipient smoke detection as well as addressable smoke detectors, along with a double interlocked pre-action sprinkler system. The system can be monitored from the master control room, as well as from control panels found within each computer room.

DuPont Fabros Technology Inc. (NYSE:DFT), one of the country's leading data center owners, operators and developers of wholesale data centers, recently opened the SC1 facility, which is spread over 16 acres. DuPont Fabros spared no expense to make all of its data center systems at SC1, including its fire and smoke alarm systems, as advanced as possible.

One of the center's objectives is to provide extensive monitoring to protect each tenant's critical load. SC1 offers 88,000 square feet of raised floor and 18.2 MW of available critical load. It is powered by its own dedicated substation.

NOTIFIER®
by Honeywell

NOTIFIER WORLD HEADQUARTERS
12 Clintonville Road • Northford, CT 06472 USA
Tel: 203-484-7161 • Fax: 203-484-7118
www.notifier.com



Intrepid Electronic Systems Gives Fail Safe Fire Protection at San Jose's SC1 Data Center

Intrepid was hired by Cupertino Electric to procure, program and test the fire alarm system to fulfill DFT's rigorous fire alarm specifications. Cupertino Electric, Inc., which helped engineer and install the system, hired Intrepid, who called on NOTIFIER, a leading fire alarm system equipment manufacturer, to provide the devices and monitoring stations for the networked system.

When Intrepid Electronic Systems programmed and tested the state-of-the-art fire alarm system for the DuPont Fabros Data Center (SC1) in Santa Clara, California, they had to think big. The 360,000 squre foot data center is one of the largest data centers ever built in Silicon Valley. It's spread over 16 acres of a prime commercial location and eleven buildings were demolished so the data center could be constructed.

Intrepid turned to NOTIFIER to fulfill the fire alarm system design equipment specifications, testing a four-level redundant system that issues several levels of alerts for each individual computer room before a full scale alarm is activated. The system is designed to prevent an incident, while saving expensive computer equipment from water damage.

DFT evolved its business model for SC1 from a proprietary state-of-the-art design that includes large, high density computer rooms and an efficient evaporative chilled water mechanical plant. The facility is designed and constructed in accordance with LEED standards.

The facility currently has five carriers—AboveNet, AT&T, Layer 42, Silicon Valley Power Fiber Enterprise and Verizon—that are available for quick fiber deployment and to provide tenants with secure and diverse access to the facility. DFT deploys strong, on-site operations teams at each facility to run, operate and provide its tenants with the ultimate in data center expertise.

Intrepid project manager CC Biggs said the networked fire alarm system is designed for maximum effectiveness. It includes a main control center that is monitored by DFT staff 24 hours a day. The center is networked with over 2,700 fire alarm system monitoring devices that are installed throughout the computer rooms in Phase One.

"Each computer room has 200 smoke detectors," said Biggs. "100 are at the ceiling, and 100 are below the floor. We also have four aspiration smoke detectors in each room. These are layered over the spot smoke detectors, and are used as a way to prevent a potentially small incident from growing. The aspiration smoke detection system runs a laser light through the air sampling system looking for smoke."

Biggs says that each room also has its own control panel, a key part of the cross-zone double interlock fire alarm system.

"These control panels allow an independent response by room to a localized incident," said Biggs.

Paul Hopkins, Regional VP of Sales and Leasing for DuPont Fabros Technology, Inc., is proud of the facility's superior level of fire protection.

"Customers can feel comfortable that their mission critical infrastructure is being supported by a proven facility design and operations team."

Reprinted from The Voice, with permission from NECA-IBEW of Northern California

For over 60 years, NOTIFIER has been a leader in the fire alarm industry. Today, we are the largest manufacturer of engineered fire alarm systems with over 400 distributors worldwide, and regional support operations on every continent for the flexibility and options your business needs.

NOTIFIER - Leaders in Life. Safety. Technology.

NOTIFIER® by Honeywell