



**SIEMENS**

# ASD from Siemens – invisibly efficient

Innovative technology for early fire detection with outstanding reliability

Answers for infrastructure and cities.



# Managing even the most difficult applications

Our innovative detectors FDA221 and FDA241 take aspirating smoke detection to a new level. Thanks to the intelligent optical dual-wavelength detection technology and our patented detection chamber, they detect fire very early and with the highest accuracy.

## A solution for demanding environments

Aspirating smoke detection (ASD) from Siemens ensures reliable fire detection in demanding application areas, where very early fire detection is required and business continuity is paramount. In these environments, detectors with ASD technology are the ideal choice because they actively draw air samples from the areas requiring protection and evaluate these samples for the presence of smoke.

With our FDA221 and FDA241, we introduce two aspirating smoke detectors that further increase ASD reliability even in the most demanding environments: by combining the optical dual-wavelength detection technology with our patented detection chamber.

## New technology enables greater detection reliability

The optical detection technology uses two wavelengths – blue and infrared. This enables our aspirating smoke detectors to detect smaller airborne particles as produced in the earliest stages of overheating or as found in open fires.

The detectors then determine the size and concentration of the airborne particles to differentiate between smoke, dust and steam particles. As a result, FDA221 and FDA241 detect smoke very early and reliably with a high immunity to deceptive phenomena. The accurate detection and classification of airborne particles prevents downtimes and costs caused by false alarms. We back this claim with our Genuine Alarm Guarantee.



Our aspirating smoke detectors FDA221 and FDA241 are ideal for object protection in difficult environments or for concealed detection in high-ceiling buildings.

### Typical application areas

Our new aspirating smoke detectors are particularly suitable for application areas where environmentally challenging conditions prevail, where an aesthetically appealing solution is desired or where high detection sensitivity is needed. This is the case, for example, in

- large spaces such as lobbies, warehouses and industrial production areas,
- hard-to-access areas like cable ducts and metro stations
- or highly ventilated areas, including data centers or clean rooms.

### Highly reliable even in difficult environments

To meet the requirements of challenging applications, FDA221 and FDA241 provide up to three modes of operation: ultrasensitive, auto-discrimination and robust. An alarm threshold can be defined and programmed and both detectors have a programmable sensitivity range. Not even conditions in environmentally demanding applications can provoke a false alarm. Our aspirating smoke detectors actively monitor the ambient air for smoke and dust particles, which is especially important for the protected area. The patented chamber inside the detectors was specially designed to keep internal soiling to an absolute minimum. That is why FDA221 and FDA241 also work reliably in very dusty and dirty environments.

### Direct integration into the Sinteso™ fire detection system

FDA221 and FDA241 can be directly integrated into an existing fire detection system from Siemens, such as Sinteso, using the detection loop FDnet. The integration ensures full transparency of both message display and operation. It also allows for configuration of the detectors, performance of maintenance work and alarm and fault management directly on the fire control panel, thereby optimizing control and lowering the cost of the overall solution.

### Everything from a single source

When it comes to comprehensive fire safety, Siemens is your one-stop shop. Our complete portfolio provides all you need: an intelligent fire detection system, state-of-the-art extinguishing solutions and central operation of all your installed systems via a danger management system. Your big plus: You have only one contact person for all your fire safety and service needs.

### Highlights

- Highest detection reliability – immunity to deceptive phenomena prevents false alarms
- Ideal choice for difficult environments
- Genuine Alarm Guarantee based on the optical dual-wavelength detection technology
- Patented chamber design extends product lifespan
- Direct integration into Sinteso fire detection system
- Comprehensive fire safety from Siemens – fire detection, extinguishing and danger management from one source

Siemens Switzerland Ltd  
Infrastructure & Cities Sector  
Building Technologies Division  
International Headquarters  
Gubelstrasse 22  
6301 Zug  
Switzerland  
Tel +41 41 724 24 24

The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract. The document contains a general product overview. Availability can vary by country. For detailed product information, please contact the company office or authorized partners.

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#### **Answers for infrastructure and cities.**

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

**“We are the trusted technology partner for energy-efficient, safe and secure buildings and infrastructure.”**