

### **Revolutionizing fire safety with video-based fire detection**

December 2023  
PI 11760 BT/COM

Bosch Building Technologies introduces Aviotec 8000i IR camera with advanced AI algorithms to spot smoke and flames

- ▶ AI algorithms based on deep learning enable the Aviotec 8000i IR camera to accurately distinguish real fires from false alarms at the source in real time.
- ▶ Camera enables new applications in semi-open and outdoor spaces exposed to wind, humidity, and dust.
- ▶ Thanks to an integrated infrared illuminator, the camera reliably detects smoke and flames even in total darkness.

Grasbrunn, Germany – Bosch Building Technologies introduces a groundbreaking advancement in fire safety with the Aviotec 8000i IR camera. This new version of its video-based fire detection solution promises to revolutionize fire protection in challenging environments, such as in manufacturing, where hazardous materials that carry high fire loads are stored outdoors, in semi-open spaces, in solar plants or electric car charging stations where wind makes it difficult to detect smoke.

#### **Aviotec 8000i IR outperforms aspirating smoke detectors**

The Aviotec 8000i IR camera achieves on average 3x faster detection times compared to current aspirating smoke detectors\* – significantly improving speed. Within its specifications the enhanced AI algorithms also allow for greater reliability and accuracy in distinguishing real fire situations from false alarms. The alarm, based on an actual fire, or trouble signals, can be transmitted to a local network, or by two relays, also to the central fire panel. Trouble signals could for example result from a tilted camera, a blocked lens or a power failure.

#### **24/7 fire protection with integrated infrared (IR) illuminator**

The new camera further increases fire safety by providing fire protection 24/7 thanks to its integrated infrared (IR) illuminator. Within its specifications it

ensures the camera is fully operational even in total darkness (at 0 Lux), reliably detecting smoke and flames with pure infrared illumination. No additional lighting is required, not even any emergency lighting, making it easier and more cost-effective for specifiers and installers to use the camera.

### **Simplified installation**

Installation of the camera is further simplified by the fact that it is a one-product solution, meaning that no accessories are required. The rugged IP 67 (waterproof) housing, IR-illuminator, new 4-megapixel sensor and motorized lens are all integrated into one unit. In addition, Aviotec's Power-over-Ethernet (PoE) eliminates the need to install power cables.

### **Expanding applications: Enhancing fire safety in varied environments**

The new features of the Aviotec 8000i IR camera open up a range of new applications, improving fire safety in particularly challenging environments such as manufacturing, where hazardous materials stored outdoors can easily ignite. Irrespective of the weather and lighting conditions, Aviotec's flame and smoke detection can help to prevent fires from spreading into buildings by detecting fires in open spaces directly at the source, without the need for smoke to reach a fire detector installed indoors, such as on a warehouse ceiling.

Another area where the new Aviotec camera helps to improve fire safety is in train, metro, and bus stations where brakes or electricity can be a source of fire that takes standard fire alarms too long to detect. Aviotec also helps improve fire safety in electric car charging stations where batteries can catch fire. Charging stations are often located in half-open parking garages or outdoors where the wind can blow smoke in different directions. The highly sensitive AI algorithms with deep learning technology of the Aviotec 8000i IR camera help to detect smoke in windy conditions.

"The new Aviotec 8000i IR is the result of more than a decade of expertise in video-based fire detection. Thousands of Aviotec cameras operating in 72 countries reflect our customers' trust in this proven technology", says Patrizia Bogers, Global Business Development Manager Aviotec.

\* In EN54 Testfires TF1, TF2, TF4 and TF5, tested in 06/2023 in Bosch Fire lab, product performance depending on installation settings etc. please refer to product documentation

**Press photo/s:** #0f32a3eb

**Contact person for press inquiries:**

Florian Lauw

phone: +49 89 6290-1647

e-mail: [Florian.Lauw@de.bosch.com](mailto:Florian.Lauw@de.bosch.com)

*The Bosch division Building Technologies is a leading global supplier of security, safety, and communications products and systems. In selected countries Bosch offers solutions and services for building security, energy efficiency and building automation. About 10,900 associates generated sales of 2.5 billion euros in 2022. Protecting lives, buildings and assets is the major aim. The product portfolio includes video security, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. Professional audio and conference systems for communication of voice, sound and music complete the range. Building Technologies develops and manufactures in its own plants in Europe, Americas and Asia.*

Additional information is available online at <https://www.boschbuildingtechnologies.com>

*The Bosch Group is a leading global supplier of technology and services. It employs roughly 421,000 associates worldwide (as of December 31, 2022). The company generated sales of 88.2 billion euros in 2022. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT provider, Bosch offers innovative solutions for smart homes, Industry 4.0, and connected mobility. Bosch is pursuing a vision of mobility that is sustainable, safe, and exciting. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to facilitate connected living with products and solutions that either contain artificial intelligence (AI) or have been developed or manufactured with its help. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 470 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. The basis for the company's future growth is its innovative strength. At 136 locations across the globe, Bosch employs some 85,500 associates in research and development, of which nearly 44,000 are software engineers.*

Additional information is available online at [www.bosch.com](http://www.bosch.com), [www.iot.bosch.com](http://www.iot.bosch.com), [www.bosch-press.com](http://www.bosch-press.com), [www.twitter.com/BoschPress](https://www.twitter.com/BoschPress)