



## Predictive AIoT Fire Detection System

# GABES AlphaSense

Smarter Fire Safety for Property Managers:  
Protecting People, Property, and Brand



## The Challenge for Property Managers in Hong Kong

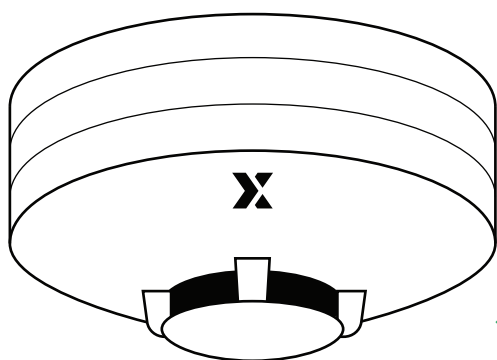
90 false alarms per day on average in HK, causing unnecessary evacuations, business interruptions, and reputational damage.  
(HKFSD Review 2024)

Systems offline during renovations lead to unmonitored fire risk and potential regulatory exposure.

No regular system health check in legacy systems – faults stay hidden, leading to compliance issues and safety gaps.

## Why AlphaSense?

AlphaSense is GABES' Predictive AIoT Fire Detection System designed to make fire detection smarter, faster, and safer.



### World's 1st Artificial Intelligence (AI) Predictive Fire Detection System

Trained on real-world data, our AI-driven fire classification reduces false alarms by over 97%, ensuring unparalleled reliability.

### Wireless Internet of Things (IoT) Technology

Wireless detectors enable quick, flexible installations, cutting labor and wiring costs by up to 50-70%. Includes web/app remote alerts for real-time monitoring.

### Developed by PhD Researchers

Developed by The Hong Kong Polytechnic University (PolyU) and City University of Hong Kong (CityUHK) PhD researchers and supported by Cyberport, combining academic rigor with industry-backed innovation.

# AlphaSense vs Traditional Systems

| Key Factor        | Traditional Wired Systems                  | GABES AlphaSense (AIoT Smart System)     |
|-------------------|--------------------------------------------|------------------------------------------|
| False Alarms      | ✗ Frequent and disruptive                  | ○ Over 97% reduction with AI             |
| System Uptime     | ✗ Offline during rewiring                  | ○ Operational during construction        |
| Installation Cost | ✗ Costly, time-consuming                   | ○ Wireless = 50–70% cheaper, faster      |
| Health Monitoring | ✗ Manual inspection only                   | ○ Automated self-check and live status   |
| Tenant Impact     | ✗ Frequent disturbance, evacuation fatigue | ○ Quiet, reliable, trust-building        |
| Brand/ESG Value   | ✗ Reactive, outdated image                 | ○ Enhances reputation and sustainability |

## Why Property Managers Choose AlphaSense

### 1 Protects Brand Reputation & Resident Trust

- Top-tier, AI-powered fire technology.
- Enhance brand image and ESG performance.

### 2 Minimizes Fire Damage & Financial Loss

- Early, accurate fire detection prevents escalation and reduces property damage.
- Uninterrupted operation during construction ensures continuous safety coverage of valuable properties.

### 3 Smarter and Hassel-free Fire Management

- Manage all properties on one platform, get 24/7 notifications when the system is down, or need battery replacement.
- Get remote alerts with web/app notifications, no matter where you are.

### 4 Reduces Manpower Wastage & Maintenance Costs

- Automated system health checks eliminate the need for manual inspection rounds.
- Minimizes labor hours tied up in false-alarm responses, resets, and tenant complaints management.

### 5 Faster, More Affordable Deployment

- Wireless installation cuts out extensive cabling, saving up to 50–70% of traditional wiring and material costs.
- Rapid, flexible deployment — ideal for both existing buildings and new developments.

### 6 Prevents Business Downtime & Operational Disruption

- AI precision avoids disrupting tenants' costly and embarrassing evacuations.
- Enables data-driven maintenance planning and real-time fault alerts, preventing unplanned shutdowns.

## Act on Our Shared Vision Join 3F Fire-Free Future Initiative



GABES is pioneering innovation in AIoT fire safety and intelligent evacuation technology.

We invite property management companies to join the “**3F Fire-Free Future Initiative**”

As a partner, you could gain the below exclusive benefits:

- Priority deployment opportunities to stay ahead of the market
- Trial discounts and promotional pricing for low-cost adoption
- Co-application for industry awards (e.g., Smart Building Awards, ESG Excellence)
- Participation in co-creation of standards, pilot projects, and joint industry promotions

If you are interested in exploring a partnership, feel free to contact us via email.

Or learn more through the channels below.



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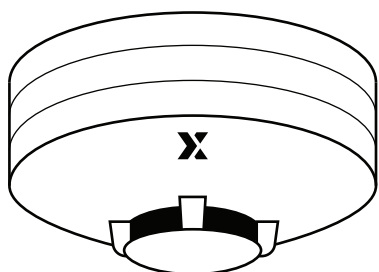
**GABES**  
New Benchmarks of Fire Safety



## Predictive AIoT Fire Detection System

# GABES AlphaSense

Empowering IoT System Integration Companies with Smart, Secure, and Scalable Fire Safety Intelligence



### Built for IoT System Integration Companies: Smarter Integration, Stronger Solutions

AlphaSense is GABES' next-generation AIoT fire detector, purpose-built for integration into IoT ecosystems and smart building platforms.

With an open, secure, and scalable API architecture at its core, AlphaSense enables integrators to effortlessly embed cutting-edge fire safety intelligence into their platforms — enhancing technical capability, reliability, and brand credibility.

## Technical Advantages for IoT Platform Integration

### 1 Fully Wireless & Cloud-Native Architecture



- REST and MQTT protocols for direct cloud-to-cloud communication.
- No wiring or proprietary gateways — fast, flexible deployment.

### 2 AI-Powered Multi-Sensor Intelligent Detection



- AI model combines signals from smoke, heat, battery status, signal strength and more.
- Reduces false alarms by over 97%, ensuring high-trust safety data output.

### 3 Open API for Seamless Integration



- Open API for 3rd-party IoT or BMS integration.
- Real-time dashboards, data analytics, and compliance reporting.
- Customizable data structures (e.g., alarm status, device health, environmental metrics).

### 4 Real-Time System Health Monitoring



- Continuous cloud-based system supervision.
- Enables proactive support and smart self-diagnosis.

### 5 Ready for Complex, Large-Scale Environments



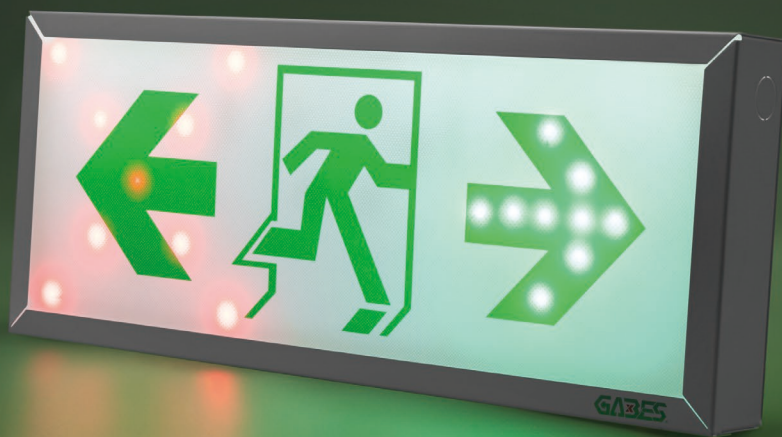
- Easily deployable in campuses industrial, commercial or residential buildings.
- Globally certified for fire safety.



## Dynamic Evacuation System

# GABES AlphaLights

The Gold standard for evacuation technology,  
the best protection for the lives of your properties.



## Why Modern Properties Need Smarter Evacuation Systems?

### Protect Lives and Reputation

Modern safety standards demand more than compliance; proactive systems safeguard both occupants and a property's brand value.

### Build Brand Image and Tenant Trust

GABES AlphaLights reflects real care for tenants and strengthens your building's identity as secure and premium.

### Smart, ESG-Aligned Management

With AIoT technology, AlphaLights reduces risk, minimizes disruption, and supports ESG goals through sustainable safety innovation.

## Why AlphaLights? – 3 Key Features

### World's 1st Proactive Fire Evacuation System

Backed by PhD research from CityUHK and PolyU, AlphaLights uses AI-driven dynamic signs to lead occupants safely in real time — enhancing your property's safety reputation and tenant confidence.



### Hassle-Free Operation

Simple to install, AlphaLights offers seamless system integration, automatic health checks, and battery and status reports — all without manual inspection, ensuring effortless, reliable smart fire management.

### Certified, Proven & Media-Recognised

Complies with international standards, research supported by HKFSD and NFPA, validated in real-world trials, and featured by TVB — proving reliability and strengthening your brand as a forward-thinking property leader.



# WHY GABES?



## Industry Support

In November 2023, our research initiative received an official Letter of Support from the Hong Kong Fire Services Department—recognizing our direction in advancing fire safety innovation.

## Academic Research

According to research, dynamic exit signage significantly shortens evacuation time. Related findings were published in the November 2022 issue of the NFPA Journal (USA). We also have the support of PolyU Fire Research Lab, testing the system's reliability in real-world scenarios.

## Patent Portfolio

We hold multiple design and technology patents from China, Hong Kong, Taiwan, and the United States, ensuring technical uniqueness, as well as product quality and reliability.

## Media Featured



In November 2024, GABES and pilot partner Pui Ying Secondary School co-hosted the world's first fire drill using a dynamic evacuation system. A controlled real-fire trigger simulated an unannounced emergency scenario.

Over 300 students and staff successfully evacuated by following AlphaLights' real-time escape guidance—validating the reliability of the AlphaNexus system.

Watch the News >>



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