Kounosoft Co., Ltd.
http://kounosoft.com

Allsense Guard

IoT & AI-based
Integrated Safety Solution

(02841) TechnoComplex Building, Korea University,
145, Anam-ro, Seongbuk-gu, Seoul, Korea | Tel. 02-3291-2200 | E-mail. info@kounosoft.com

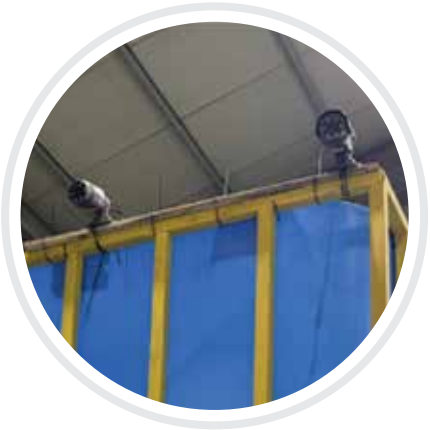
Safety Challenges in Industrial Sites

Worker Safety Management

- Presence of hazardous equipment and work zones
- Difficulty in real-time monitoring of worker access
- Management focused on post-incident response

Hazard Zone Management

- Access control required around equipment and work zones
- Risk of equipment access outside working hours
- Continuous monitoring difficult with manpower alone



Work Environment Management

- Environmental changes occur in industrial sites
- Difficulty monitoring workspace conditions
- Poor management may reduce work efficiency

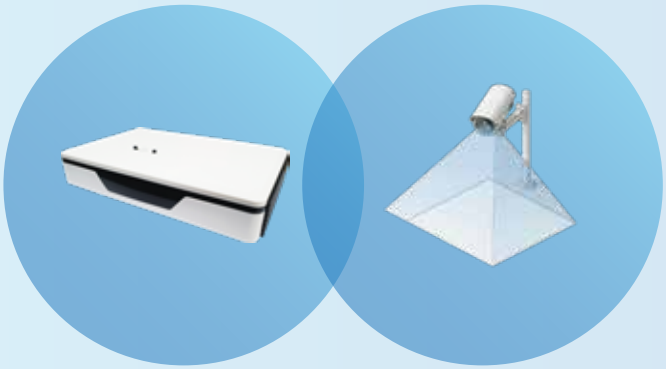
Core Solution

An integrated safety management system combining multi-sensor monitoring and AI-based risk detection

“ Allsense Guard ”

- Real-time environmental sensing
- Continuous monitoring of work environment data
- Administrator visibility on environmental changes
- Virtual fencing for hazardous equipment and work zones
- Real-time detection of worker access
- Alerts upon intrusion into restricted areas

Risk management starts with **Allsense Guard**



- 24/7 monitoring enables rapid response
- Enhanced industrial safety management
- Improved hazardous area access control
- Support for work environment monitoring
- Increased on-site safety efficiency

Use Cases

1 Hazardous Equipment Zones

Virtual fence

Worker access detection

Alert & notify

Prevent equipment accidents

2 Work Zone Safety

Access monitoring

Risk detection

Alert & notify

Ensure worker safety

3 Work Environment Management

Environment sensors

Detect temperature/humidity/air changes

Notify admin

Maintain optimal conditions

Overview

Why Allsense Guard?

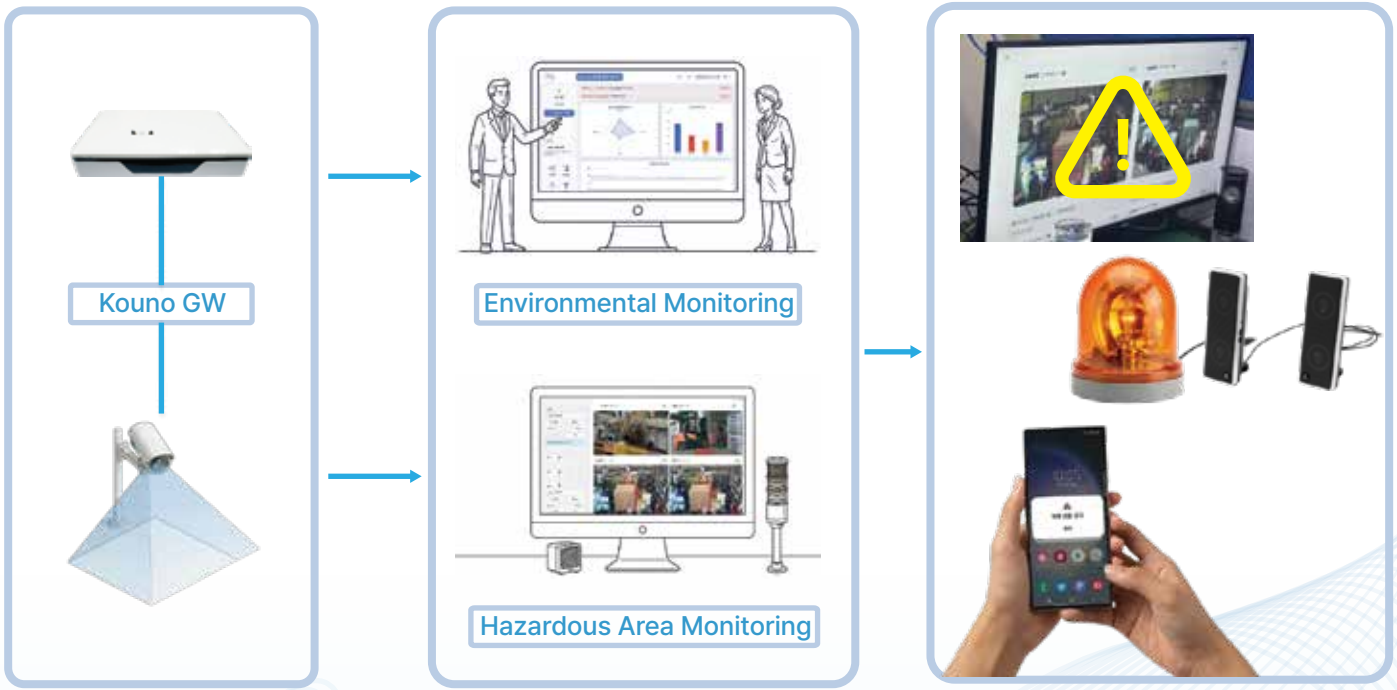
Multi-sensor environmental monitoring

AI virtual fencing

IoT-based real-time safety management

Allsense Guard is

- Allsense Guard is an IoT-based integrated safety solution combining multi-environment sensors and AI video analytics.
- Simultaneously monitors environmental conditions and detects access to hazardous zones, improving safety management efficiency in industrial sites.



Object and situation recognition via Allsense Guard system

AI Edge Computing-based on-site video analysis and risk monitoring

Real-time visual & audio alerts with administrator notification

" Integrated Safety System = Multi-sensor Monitoring + AI Virtual Fencing "

Allsense Guard Features

20+ sensors for environment detection

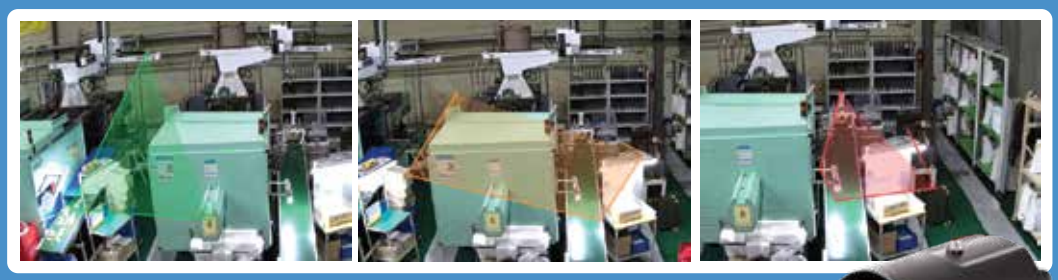
Temperature
Humidity
CO_2
Air Quality/ Fine Dust
Formaldehyde
Ozone
Flame Detection
Door opening Detection
Light/Illumination Detection
Motion Detection
Acoustic Detection
Sound Detection

8 types of harmful gases detected by MOS sensor

① Carbon monoxide
② Nitrogendioxide
③ Ethanol
④ Hydrogen
⑤ Ammonia
⑥ Methane
⑦ Propane
⑧ Iso-butane

- Periodic data transmission to server
- Server-based monitoring & management
- Alerts when thresholds are exceeded

3-level virtual fence (Safe/Warning/Danger) with alarms and voice alerts



- Flexible camera addition/removal
- Risk detection logs
- Video recording upon risk detection
- Real-time alarm on restricted zone entry

AI monitoring / Multi-sensing detection → Risk occurrence → Immediate detection → Alert & voice alarm → Accident prevention

IoT & AI based Integrated Safety Solution

Allsense Guard

(02841) TechnoComplex Building, Korea University,
145, Anam-ro, Seongbuk-gu, Seoul, Korea | Tel. 02-3291-2200 | E-mail. info@kounosoft.com