SEIKO ELECTRIC

World's smallest * / world's highest detection performance * /
solar separation proprietary technology adoption / outdoor installation possible
UV-sensitive flame detection sensor   SKH-047
✳ November 2015 currently our research

Do not miss even small flame!!

〈Full scale〉

Interlock buzzer and lamp

Coordinate with Network Camera

Outdoor solar type
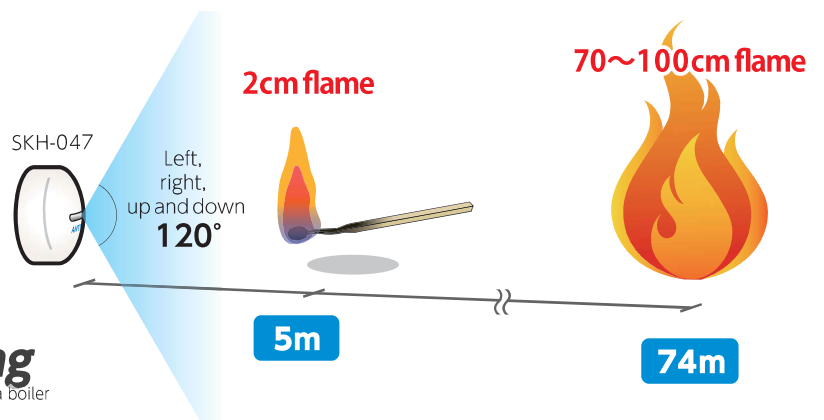
Fire sensor for heavy equipment & in-vehicle receiver

Truck sensor & in-vehicle receiver

Realize various uses !

Early fire detection
Quick and sensing performance for flame (shortest 0.5 seconds)

Arson early detection
Sense the flame before the smoke and heat is generated

Outdoor fire sensing
There is no malfunction by the light of the sun & drip-proof

Smoking prevention
Corresponding to various applications by the detection time setting

Lighting failure monitoring
It can be diverted to the monitoring of the constantly ignition location, such as a boiler

Very high detective performance

SKH-047

Left, right, up and down **120°**

2cm flame

70〜100cm flame

5m

74m

How to use

The first discovery of the outdoor suspicious fire

With the unique solar separation technology, it surely discovers the fire occurs at bright outdoors where had happened conventional malfunction many times.
Even 2cm about fire, it can discover at that moment to be arson because it can be determined from about 5m away.
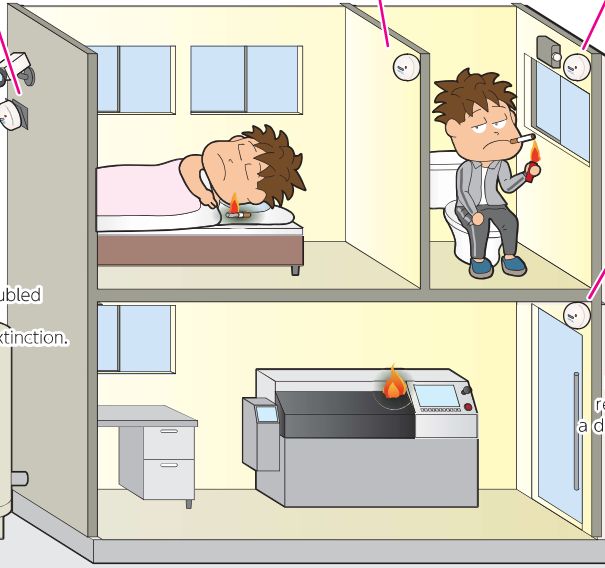Image recording is also possible at the time of detection by cooperation with the camera.

Lighting failure monitoring

It can be used to monitor the place that is troubled when the fire such as boilers goes out.
Immediately it will be notified at the time of extinction.

Smoking in bed measures

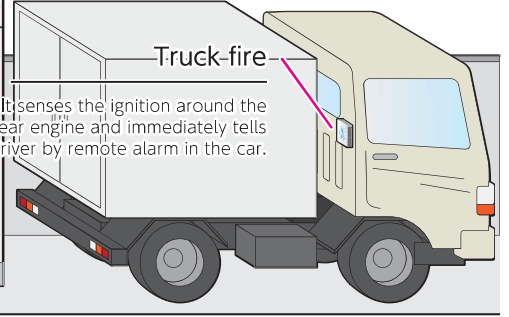It senses instantly in the event of a fire.

Smoking prevention

If installed in a non-smoking place it can sense the small flame to determine the cigarette lighter of the fire, and it becomes possible to emit an immediate warning sound at the time of ignition.
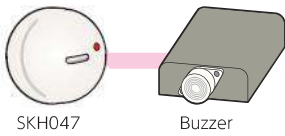
Equipment fire monitoring

In the equipment environment a flash to the dust and cutting debris is a concern due to the heat generation, it can discover a fire at a far early stage than the fire alarm of the conventional heat perception and smoke perception method reacts.

Truck fire

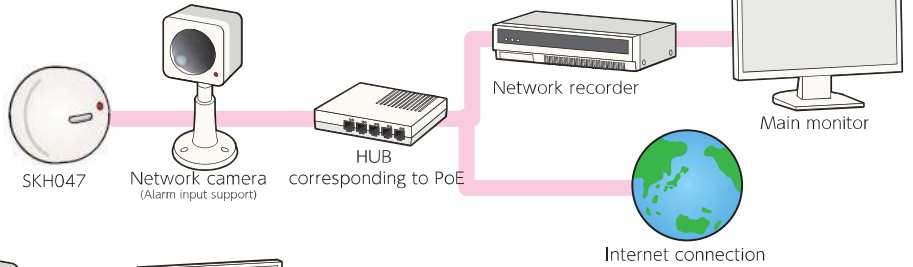It senses the ignition around the rear engine and immediately tells a driver by remote alarm in the car.
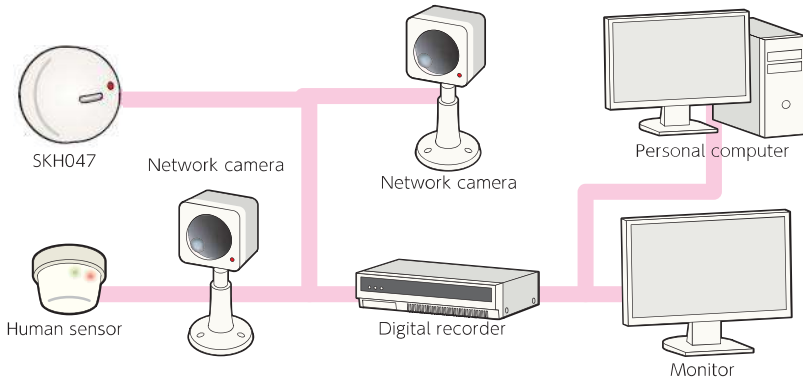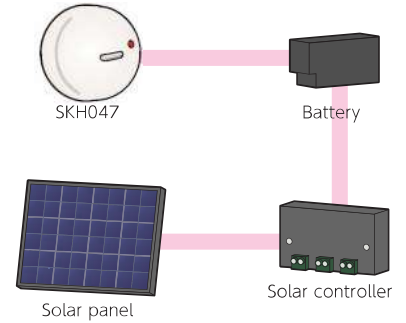
System expansion examples

Basic connection

SKH047 — Buzzer

Network

SKH047 — Network camera (Alarm input support) — HUB corresponding to PoE — Network recorder — Main monitor — Internet connection

Composite connection

SKH047 — Network camera — Network camera — Personal computer
Human sensor — Network camera — Digital recorder — Monitor

Outdoor solar operation

SKH047 — Battery
Solar panel — Solar controller

Specification

Item name	Flame detection sensor	Truck fire sensor	Fire sensor for heavy equipment
Model	SKH047	SKH075	SKH086
Detecting scheme	UV detection method (wavelength 185 to 260nm)		
Detecting angle	Left, right, up and down 120 degrees	Left, right, up and down 90 degrees	Left and right 90 degrees & up and down 30 degrees (it can be adjusted at the head replacement)
Detecting distance	About 5m in 2cm of flame		
Detecting timer	0.5 seconds, 1 to 31 seconds (1-second increments)	0.5 seconds	0.5 seconds, 4 seconds, 8 seconds, 12 seconds (4 stages)
Power-supply voltage	DC7V～24V	DC12V～24V	DC12V～24V (Anti-reverse connection circuit built-in)
Output	1c relay contact (AC125V 0.5A DC24V 1A) or open collector (200mA) 30 seconds of delay	350MHz band weak radio wave (ID recognition system)	350MHz weak radio wave (ID authentication method), Open collector (200mA)
Indicator light	Operating lights (in conjunction with the output)	Power lamp which is an operation displayed in a dedicated receiver	None. Operation displayed in a dedicated receiver
Wiring	4-wire (two powers, two outputs)	2-wire (two powers)	6-wire (two powers, two outputs, two detection timer settings)
Installation location	Inside and outside	Backside of cabin	Engine room
Temperature range	-10 ℃ ~ + 60 ℃ (No condensation and freezing)	-10 ℃ ~ + 60 ℃ (No condensation and freezing)	-10℃ ~ +100℃
Housing material	ABS resin (white)	Aluminum (panel: polycarbonate)	Stainless steel (SUS304 including a baked part)
External dimensions	Φ68×25mm	130 × 90 × 20mm (projections are not included)	53 × 84 × 26mm (projections are not included)
Waterproof and dustproof	IP64	Waterproof caulking processing	Completely waterproof