SEIKO ELECTRIC

Smallest in the world* / Highest detec*on performance in the world*
/ Applies original sunlight separa?on technology / Possible to install outdoors

Ultraviolet Flame Detector   SKH-047

*According to our research in October, 2016

Even a small flame can be detected!!
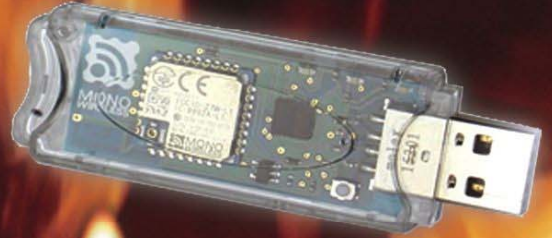
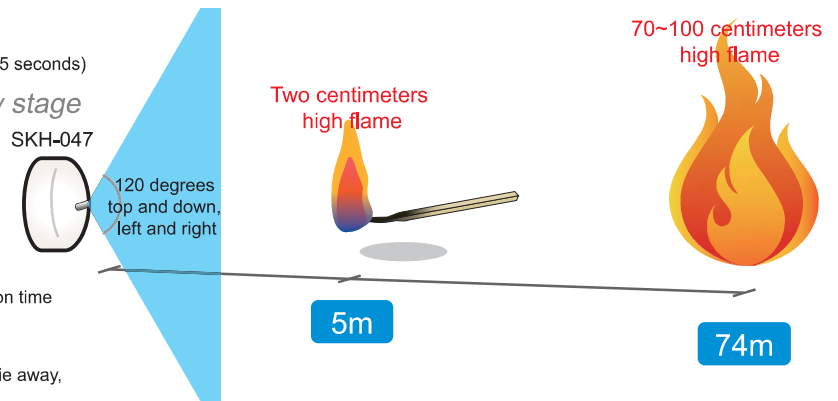|				
Sensor network type	Linked with a network camera	Solar type for outdoor use	High heat-resisting, anti-shock, completely waterproof	Flameproof

Realises all kinds of purposes!

Extraordinary high detection performance

- **Detects** *early stage of fire*

  Prompt flame detection performance (fastest is only within 0.5 seconds)

- **Discovers** *wilful fire raising* at an early stage

  Detects flames before smoke or heat generates

- **Detects** *outdoor fire*

  No malfunction caused by sunlight occurs, waterproof model

- **Prevents** *occurrence of smoking*

  Deals with various purposes with different settings of detection time

- **Monitor of** *going out of a flame*

  Possible for monitoring locations where need flames not to die away, such as boiler rooms, etc.

SKH-047

120 degrees top and down, left and right

Two centimeters high flame

70~100 centimeters high flame

5m

74m

Purpose of use

Discovery of outdoor suspected cases of arson

By applying the original sunlight separation technology, the sensor is able to detect the fire in the bright wild where malfunction of it always occurs.
For a two centimeters high flame, the sensor can detect it from five meters away therefore, it is able to detect the suspected case of arson right away.
By linking the sensor with a camera, image recording when fire is detected is made to possible.

Measures to preventing cigarettes from causing a fire

It detects flames right away caused by a cigarrete.

Preventing the occurrence of smoking

Since it can detect a small flame, when installed in some areas that smoking may occur, it will recognise a flame from the lighter and set off an alarm right away.

Monitor of fire caused by devices

In an environment that has risks of igniting dust or swarf by heat from the equipment or devices,
the ensor is able to detect the fire way earlier than normal heat detectors or smoke detectors.

Monitor of going out of a flame

The sensor can be used for some locations that need flames not to go out, such us boiler rooms, etc.
It notifies people right away if detecting the flame goes out.

For vehicle fire

The sensor detects flames near the rear engine, and notifies the driver via the remote alarm inside the truck.

Remote monitor (*ZigBee wireless system)

By applying ZigBee (?) on the communica?on of the existing high sensitive flame sensors, it's possible to send information to tablets or PCs that connected through network, thus making it possible for an earlier response.
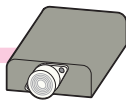
*What is ZigBee?
It is one of short-range communication echnologies for home electrical appliances based on IEEE 802.15.4. Maximum transfer distance is 30 meters.

Examples of system expansion

Basic connection

SKH047 — Buzzer

IOT

SKH047 — PCs, tablet terminals — Internet

Specification

Product name	Flame detection sensor	High-performance flame detection sensor
Model	SHK047	SHK086
Detection method	Ultraviolet rays detection (wave length 185 ~ 260nm)	
Detection angle	120 degrees top and bottom, left and right	90 degrees left and right,30 degrees top and bottom (Possible to make adjustments by changing the sensor)
Detection distance	A two centimeters high flame can be detected from five meters away.	
Detection timer	0.5 seconds, 1~31 seconds (by the second)	0.5, 4, 8, 12 seconds (four stages)
Power voltage	DV7V ~ 24V	DC 12V ~ 24V (built-in reverse connection)
Output	1C relay contact (AC 125V 0.5A DC 24V 1A) or an open collector (200mA)	1C relay contact (AC 125V 0.5A DC 24V 1A) or an open collector (200mA)
Current consumption	20mA	
Indicator light	Illuminates during operation (linked with output)	No indicator light Operation display using the exclusive receiving machine (purchase separately)
Wiring	Four wires (two for power supply, two for output)	Six wires (two for power supply, two for output, two for settings of detection timer)
Installation location	Indoors or outdoors	Indoors, outdoors, engine rooms, etc.
Temperature range	-10℃ ~ +60℃ (no condensa on, no freezing)	-10℃ ~ +100℃
Enclosure material	ABS resin (white)	Stainless (SUS 304, partially contains plastic)
External dimensions	Φ68×25mm(sensor)	53×84×26mm(not includes projections)
Waterproof, dustproof	IP64	Completely waterproof

Please inquire for the details at the following ——— Responsible for ———

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