ltem	Master unit
Battery	AC 100V
Size	W190×H110×D50mm
Weight	450g
Function	Real-time display function Handset individual data display function Graph display function Alarm display / alarm mail transmission function Form function (CSV output) Setting function (Threshold setting/Temperature ,humidity compensation type setting/Odor concentration conversion formula setting/ Email settings/Sensor name setting/Graph vertical upper limit setting)
ltem	Cordless extension unit
Product name	LIMOS
Measurement target	Odor gases

measurement target	odol gases
Gas sensor	Metal oxide semiconductor gas sensor
Suction	Small diaghragm pump
Suction volume	800ml/min
Pump life	10,000 hours
Use temperature range	0 ~ 40℃
Size	$W400 \times H300 \times D150 mm ~(Excluding ~protrusions)$
Weight	7kg
Communication distance	Outdoor ; 300m~1km
Communication standard	LoRa

Cordless extension unit (Antenna unit)
LoRa (Private)
Outdoor About 300m $\sim$ 1km $$ (Depends on the environment)
920MHz

ltem	Cordless extension unit (Power supply unit)
Input power supply	AC100V
Output power supply	DC12V 4A

\*Please secure a power supply of 1A or more at the time of installation.

It will be passed to the breaker terminal. Please prepare the wiring to the power supply section.

### Periodic maintenance

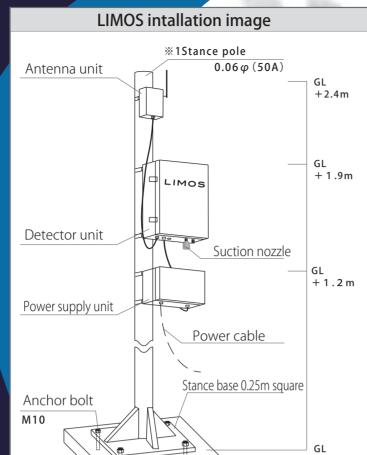
Maintenance of the pump and sensor element is required after the usage time is about 9000 hours.When the maintenance time is approaching, the "M" mark will light up on the display to let you know when it is needed.

#### 【販売元】 KALMOR<sup>®</sup> Karumoa Co.,Ltd.

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%2 Concrete foundation

%1 Stance pole is charged separately.

%2 Concrete foundation work, power supply work, equipment installation, and other items not mentioned are charged separately.

## **PROHIBITION**

There is a possibility that the sensor element will deterioration if measure a substance like the following; Hydrogen chloride, Acetone, Sulfur dioxide, Coal-tar, Silicon, Chlorine, Flurocarbon gas, Sulfuric acid mist, Hydrochloric acid mist, Oil mist and so on.

## 

There is a possibiliety that you can not measure correctly in case of including like the following;

#### Ozon, NOx, SOx

[SALES AGENT]

## KALMOR

## Fixed-point Odor observation system

LIMOS Odor sensor KAGUROBO series KAGUROBO www.karumoa.co.jp

%Product specifications and contents may change without prior note May consider an option to take a legal action against an imitation product. Caution an imitation product, copy product, and so on.



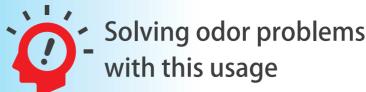


X

# Fixed-point odor observation system for professional use Made by an odor control expert

Odor can be measured without going to the site. Fixed point installation type odor sensor.

Odor sensor KAGUROBO series **KKAGUROBO** 



To install it on the boundary of the site and monitor the leakage of odor to the outside of the factory.

To digitize odor fluctuations toward the realization of low carbon



## Centralized management of odor data

By arranging sensors in multiple locations, this product can centrally manage odor fluctuations in business establishments such as factories. Real-time monitoring is possible 24 hours a day, 365 days a year. It also has an alert function, which can be used for risk management of odor problems.

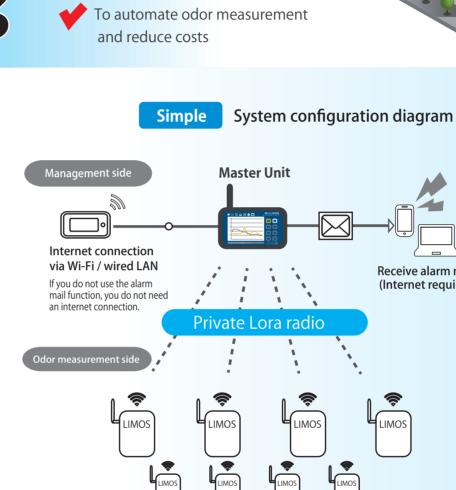
### Communication distance is from 300m to maximum 1km

Communication is possible up to a distance of about 300 to 500 m in places with many buildings such as factories and facilities, and about 1 km in places with good visibility with few obstacles. With LIMOS, you can save yourself the trouble of checking the odor at the place where the odor is generated each time.

#### Odor concentration/Odor index conversion function

Equipped with a calibration curve function to display the measured value as an approximate value of odor concentration / exponent. This makes it possible to manage the odor concentration / index (converted value) on the master unit.

\*Creating an odor concentration conversion formula is a separate option.



**Typical functions** 

### Alert display / email function

If the threshold value set arbitrarily is exceeded, an alert will be displayed on the master unit. You can also receive alert contents by e-mail by connecting to the Internet %It is necessary to set the SMTP Server address and Port No.

Femperature / humidity correction

Due to the characteristics of conventional odor sensors. unintended measurement results may occur due to the effects of environmental temperature.LIMOS is equipped with a temperature compensation function to reduce environmental factors as much as possible Reduces measurement abnormalities.

#### Can be connected to up to 8 detectors

Eight units can be connected to one master unit (receiver) a standard.You can consider various installation metho such as installing in a well-balanced manner in all directi or installing in a location where complaints are likely to occur

LIMOS

## No need for dedicated software / CSV output

No special software is required. It can be used without being affected by OS updates Since the data can be output as a csv file, you can download the data

and use it yourself by using a USB media or the like

## Case1:Food factory

At this food factory, the odor generated from the wastewater treatment plant of the factory was complaining. As a first step in combating bad odors, this factory has introduced LIMOS and started checking the status of odor generation. Presenting the company's attitude toward problem solving and managing the odor generation situation of the vast factory from the office has reduced the man-hours of daily measurement work.







#### 7inch touch panel dedicated Easy to use management PC (master unit)





#### ▲ Real-time graph display screen



Smell detector (slave unit, up to 8 units can be connected)

▲Sensor individual display screen %The screen is an image under development and is different from the actual product.

### Case2:Livestock farm





factory.

LIMOS was introduced for routine odor control and monitoring. LIMOS continues to show its corporate stance to the local residents by constantly and automatically measuring and monitoring the odor leaking from the

