

■ USE CASE



Quality Control



Environment Measurement



Deodorization Effect Confirmation



Environment Odor Test



Industrial Odor Test



Need maintenance to keep up measurement correctly.

A pump and sensor element is consumption article. It needs to be changed periodically or every 4,000 hours.

We inform the maintenance timing by indicating [M] mark on display.



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, Fluorocarbon gas, Sulfuric acid mist, Hydrochloric acid mist, Oil mist and so on.



CAUTION

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

Ozon, NOx, SOx

ACCESSORIES

The following accessories are included in a box.



micro SD card



AC power supply



Suction nozzle



Strap



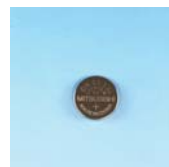
Dust filter



Carbon Filter



AA-sized battery



Button battery

< SALES >

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< SALES AGENT >

KALMOR®

Kalmor Odor sensor KAGUROBO series

KAGUROBO

POLFA

Portable Olfact meter <POLFA>

MADE IN JAPAN



www.karumoa.co.jp

Odor Measuring Instrument produced by an expert of odor is **POLFA**

Kalmor Odor sensor KAGUROBO series



Made in Japan



Operability

Nice Controllability

Anybody can use intuitively and easily because there is just truly necessary functions. A light and a small body, so it doesn't bother you to carry.



Graphical

Graph display

POLFA indicates measurement result instantly on display. It is easy to understand that odor intensity changes.



Sensing

High Sensitivity

POLFA adopts Metal oxide semiconductor gas sensor which are higher sensitivity than conventional odor measuring instrument of Karumoa.

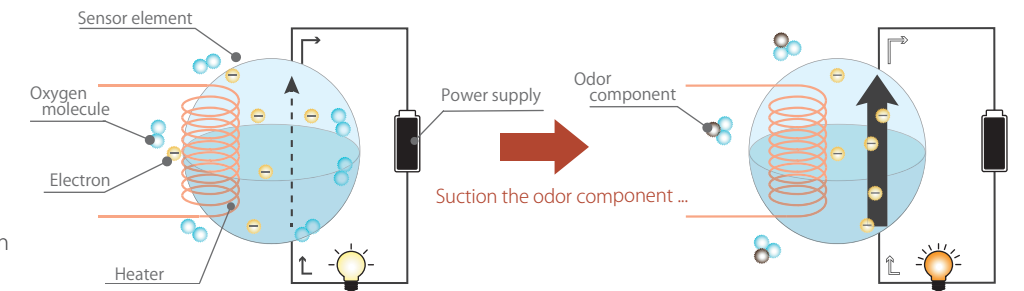


Measurement principle

The oxygen in the air absorbs the electrons on the sensor surface when it is heated at high temperature. It becomes a resistance of electrical flow in the sensor element.

If an odor component with a reducing potential comes to the sensor under this condition, the electrons in the sensor can move freely and the electricity can flow highly.

This product reads this voltage difference and displays the odor intensity as the measured value calculated by our original formula.



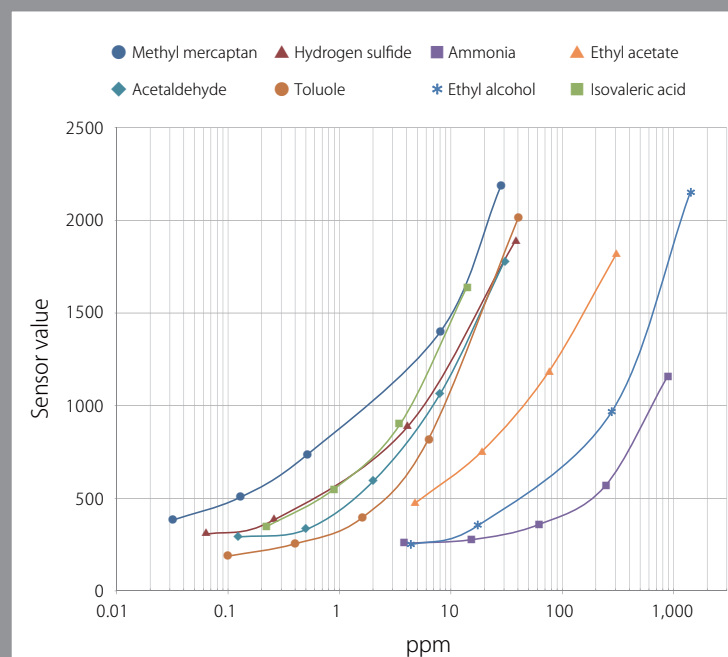
Oxygen in the air absorbs electrons on the sensor element surface. The free electrons in the sensor element goes reduced, and this makes a resistance of electrical flow.

Under clean air environment

Odorous substance reacts with oxygen. Then, electrons in the sensor element can move freely, and electricity can flow highly.

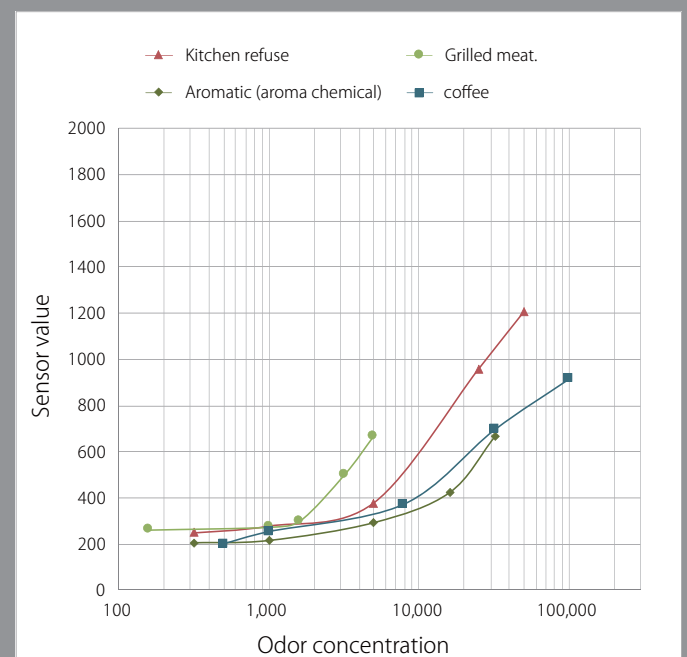
Under odor mixed air environment

Sensitivity characteristics of single gas component (reference value)



※ The sensitivity characteristics differ depending on the odor substance to be measured and the individual differences of the elements. Please use the scale function when measuring substances with low sensitivity.

Sensitivity characteristics of mixed odor (reference value)



※ Even in the case of mixed odor, sensitivity characteristics will differ depending on the target odor. By acquiring calibration curve data for each mixed odor, simple odor concentration management will be possible with using the odor sensor. (Calibration curve data acquisition is the charged service separately)



Do not need other app DATE COLLECT

POLFA is equipped with date collect function mode. It is possible that you measure long hours at 1 second, 1 minutes, 30 minutes and so on intervals. Date format is CSV files and this is recorded to micro SD card, so you do not need install any application.



Record atmospheric temperature / humidity SIMPLE THERMO/HYGROMETER

POLFA is equipped simple thermometer and hygrometer to support measurement. POLFA is affected from temperature and humidity. After measurement, use the measured value as reference.



Possible to adjust zero point ZERO POINT CALIBRATION

Usually you do not need calibration but you can get a temporary zero point calibration value when sensor material deteriorate or you need.



Long hour working outside AA-SIZED BATTERY

Power saving design, up to 16 hours operation available with four AA dry cell batteries. Compared to rechargeable batteries, it's easy to bring spare power supply, and convenient in the field.

※ Up to 8 hours operation with the condition of display light always on.



Change a measuring range SCALE CHANGE

When odor is weak, you use this function. This function makes the difference big, so you can measure a slight difference.



Make a graph of odor fluctuations GRAPH DISPLAY

A graph is a real-time measured value, which is plotted every 2 seconds. you can see odor fluctuations conveniently.



Indicate max value PEAK-HOLD FUNCTION

It is possible to indicate max value during peak-hold. If you miss a measured value, it is ok.



Bilingual ENGLISH LANGUAGE MENU

MENU is written in simple English for every users. Anyone can use this.