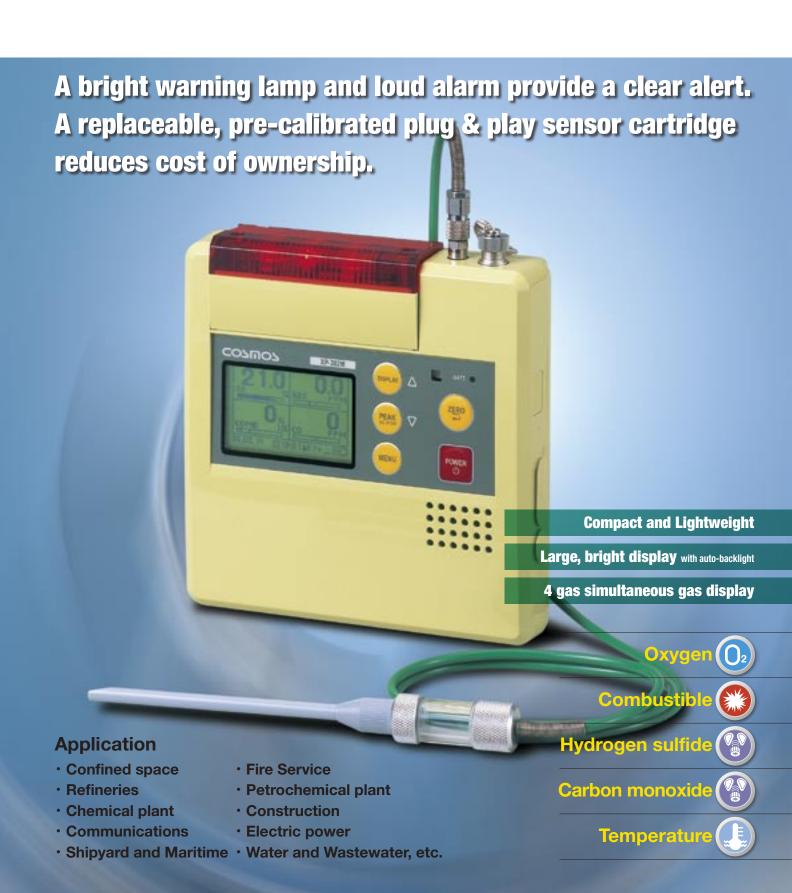


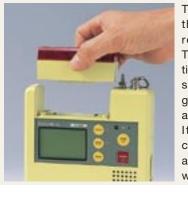
# Multi-Gas Detector Model XP-302M



# We Placed Priority on Operating Ease... And Created Multi-purpose, Multi-gas Measurement

Simultaneously measures and displays oxygen, Combustible gas (methane), hydrogen sulfide, and carbon monoxide.





The user can easily replace the sensor cartridge by removing four screws. This saves the labor and time ordinarily required for sensor replacement and gas detector calibration, and raises work efficiency. It also lowers running costs, and reduces the amount of maintenance work required.

## A bright warning lamp and loud alarm provide a clear alert.



The alarm lamp is large and bright, and combines with an audible alarm that sounds at a frequency that can easily be heard. The alarm alerts surrounding people in virtually any kind of working environment.

# An external alarm (provided with an 8m cable) can also be connected.

The buzzer and warning lamp alert people at a distance.



#### Data can be recorded.

The date and time, gas concentration, and temperature can be recorded at 30-second intervals for up to 150 hours. (Data-logging function)

\* The optional Log Data Download software makes it possible to read data on a PC.

#### **Compact and Lightweight.**

The compact design and lightweight (approx. 870 g) ensure easy use in a variety of applications.

## A three-gas type is also available.

A three-gas type is available for users who want to measure three types of gases.

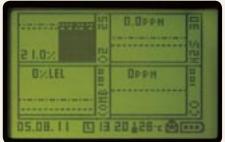
\* For details, refer to the ordering information.

#### A large, easy-to-see display shows the conditions of four gases simultaneously.

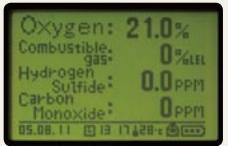
Select either the standard display, a graphic display, or an English display with a single button. A temperature display function is also included. The backlight automatically lights in dimly lit places.



Standard display (actual size)



Graphic display (actual size)



English display (actual size)

### Ordering information\*

XP-302M

4 gases (Combustible, Oxygen, Hydrogen sulfide, Carbon monoxide)

- B 3 gases (Combustible, Oxygen, Hydrogen sulfide)
- C 3 gases (Combustible, Oxygen, Carbon monoxide)
- \* Combustible : Methane

- Choose one from A - C

- with soft case and 1m sampling hose (with drain filter and probe)
- with soft case, 8m sampling hose (with float) and carrying case
- 3 with aluminum case, 8m sampling hose (with float), an external alarm (with 8m cable) and AC adaptor
- with aluminum case, 8m sampling hose with a hose reel (with float), an external alarm with a cable reel (with 8m cable) and AC adaptor

1m sampling hose type with soft case

### XP-302M-□-1\*



- · This type has a 1m sampling hose (with drain filter and probe), and comes with a soft
- · Well suited for ensuring the safety of workers, who can easily wear it for regular inspections and safety checks.





Keeps workers safe during regular factory inspections and worksite operations.

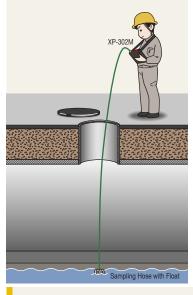
#### 8m sampling hose type with soft case

XP-302M-□-2\*1

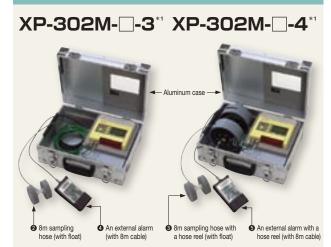
Choose one from 1 - 4

8m sampling hose (with float)

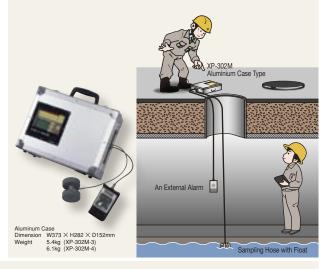
- · This type has an 8m sampling hose (with float), and also comes with a soft case. · Handheld inspections can be
- conducted to check safety conditions prior to starting work.



#### Aluminum case type (Not explosion-proof)



- · This type is provided with an 8m sampling hose (with float), an external alarm, and an aluminum case.
- · The sampling hose and external alarm can be used to check safety conditions before and during work while carrying the unit in its aluminum case.
- The compact, lightweight aluminum case ensures easy carrying. The case also resists vibration and impacts while carrying and using.



Keeps workers safe before and during work in tanks and manholes, and in underground worksites such as tunnels.

#### Accessories



1m sampling hose (with drain filter and probe)

#### 8m sampling hose type



8m sampling hose



8m sampling hose with a hose reel



An external alarm (with 8m cable)



An external alarm with a cable reel (with 8m cable)

## **Specifications**

| Model                            |                          | XP-302M   |                 |                                   |                                   |
|----------------------------------|--------------------------|---|-----------------|-----------------------------------|-----------------------------------|
| Gases detected                   |                          | Combustible Gas (Methane)   | Oxygen          | Hydrogen Sulfide                  | Carbon Monoxide                   |
| Detection Principle              |                          | Catalytic combustion  | Galvanic cell   | Controlled potential electrolysis | Controlled potential electrolysis |
| Gas sampling method              |                          | Sample-draw by internal electric sampling pump  |                 |                                   |                                   |
| Measuring range                  |                          | 0-100%LEL   | 0-25.0vol%      | 0-30.0ppm                         | 0-150ppm                          |
| (Service range)                  |                          |   | (25.1-50.0vol%) | (30.1-150ppm)                     | (151-300ppm)                      |
| Accuracy (Repeatability)*1       |                          | < ±5%LEL  | < ±0.5vol%      | < ±1.5ppm                         | < ±10ppm to 100ppm                |
|                                  |                          |   |                 |                                   | < ±15ppm to 150ppm                |
| Alarm set points                 | Level 1                  | 10%LEL  | 19.5vol%        | 10.0ppm                           | 50ppm                             |
|                                  | Level 2                  | 30%LEL  | 18.0vol%        | 15.0ppm                           | 100ppm                            |
| Response time*2                  | with a 1m sampling hose  | < 25 sec.   | < 20 sec.       | < 30 sec.                         | < 30 sec.                         |
|                                  | with an 8m sampling hose | < 40 sec.   |                 |                                   |                                   |
| Operating temperature & humidity |                          | −10°C to 40°C, 95% RH (non-condensing)  |                 |                                   |                                   |
| Battery type                     |                          | 4 × AA Alkaline   |                 |                                   |                                   |
| Display                          |                          | A large LCD with backlight provides simultaneous and continuous readout of all gases being monitored.                 |                 |                                   |                                   |
|                                  |                          | 3 user-selectable display modes (standard display / graphic display / English display).                               |                 |                                   |                                   |
| Alarms                           |                          | 90+ dB buzzer, flashing LCD and warning lamp  |                 |                                   |                                   |
| Operating hours*3                |                          | 8+ hours on 4 × AA alkaline cells (20°C, no alarm, no backlight and datalogging OFF)                                  |                 |                                   |                                   |
| Safety design                    |                          | Intrinsically safe design Ex ibd II BT3   |                 |                                   |                                   |
| Functions                        |                          | ·Automatic backlight (in dim light or alarm condition) ·Zero adjustment ·Peak hold ·Buzzer control                    |                 |                                   |                                   |
|                                  |                          | ·Low flow alarm ·Datalogging function (up to 150 hours) ·Buzzer stop ·Alarm test ·Display of remaining                |                 |                                   |                                   |
|                                  |                          | battery level, current time and temperature   |                 |                                   |                                   |
| Demensions                       |                          | Approx. 152 (W) $\times$ 152 (H) $\times$ 42 (D) mm   |                 |                                   |                                   |
| Weight                           |                          | Approx. 870g  |                 |                                   |                                   |
| Standard accessories*4           | XP-302M-□-1              | 1m sampling hose (with drain filter and probe) and soft case  |                 |                                   |                                   |
|                                  | XP-302M-□-2              | 8m sampling hose (with float), soft case and carrying case  |                 |                                   |                                   |
|                                  | XP-302M-□-3              | Aluminum case*5, 8m sampling hose (with float), an external alarm (with 8m cable) and AC adaptor                      |                 |                                   |                                   |
|                                  | XP-302M-□-4              | Aluminum case*5, 8m sampling hose with hose reel (with float), an external alarm with a cable reel (with              |                 |                                   |                                   |
|                                  |                          | 8m cable) and AC adaptor  |                 |                                   |                                   |
| Optional accessories*6           |                          | ·Log data download software (for Windows 2000 or XP)  |                 |                                   |                                   |
|                                  |                          | •20m sampling hose for float  |                 |                                   |                                   |
|                                  |                          | •30m sampling hose for float  |                 |                                   |                                   |
| * 1 Under identical conditions   |                          | * 2 T00 * 3 It depends on the environmental conditions, service conditions, storage period, and battery manufacturers |                 |                                   |                                   |

\* 1 Under identical conditions \* 4 A three-gas type is also available

\* 2 T90 \* 5 Non explosion-proof type

\* 3 It depends on the environmental conditions, service conditions, storage period, and battery manufacturers \* 6 Please contact our dealers / distributors for available accessories

We received ISO 9001 certification for our design, manufacturing, sales, and service operations at our head office, branches and factories.



Registered No. : JQ 064C







#### Safety warning

- Read the operating instructions thoroughly before use. Always operate in accordance with the instructions.
- Be sure to choose the sensor designed to detect the required type of gas.

  Use of the wrong sensor type could cause an accident.



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