Multi-Gas Detector
Model XP-302M

A bright warning lamp and loud alarm provide a clear alert. A replaceable, pre-calibrated plug & play sensor cartridge reduces cost of ownership.

Application
- Confined space
- Refineries
- Chemical plant
- Communications
- Shipyard and Maritime
- Fire Service
- Petrochemical plant
- Construction
- Electric power
- Water and Wastewater, etc.

Compact and Lightweight
Large, bright display with auto-backlight
4 gas simultaneous gas display

Oxygen
Combustible
Hydrogen sulfide
Carbon monoxide
Temperature
A replaceable, pre-calibrated plug & play sensor cartridge reduces maintenance cost.
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 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.

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.
**Ordering information**

<table>
<thead>
<tr>
<th>Model</th>
<th>Specification code</th>
</tr>
</thead>
<tbody>
<tr>
<td>XP-302M</td>
<td></td>
</tr>
</tbody>
</table>

Choose one from A – C

A  4 gases (Combustible, Oxygen, Hydrogen sulfide, Carbon monoxide)
B  3 gases (Combustible, Oxygen, Hydrogen sulfide)
C  3 gases (Combustible, Oxygen, Carbon monoxide)

Choose one from 1 – 4

1  with soft case and 1m sampling hose (with drain filter and probe)
2  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
4  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**

- **XP-302M-1**
  - 1m sampling hose (with drain filter and probe)
  - Soft case

- **XP-302M-2**
  - 8m sampling hose (with float)
  - Soft case

- **XP-302M-3**
  - 8m sampling hose with a hose reel (with float)
  - Aluminum case

- **XP-302M-4**
  - An external alarm with a hose reel (with 8m cable)
  - Aluminum case

---

### 8m sampling hose type with soft case

**XP-302M**

- **XP-302M-1**
  - 1m sampling hose (with drain filter and probe)

- **XP-302M-2**
  - 8m sampling hose (with float)

- **XP-302M-3**
  - An external alarm (with 8m cable)

---

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

**XP-302M**

- **XP-302M-1**
  - 1m sampling hose type with soft case

- **XP-302M-2**
  - 8m sampling hose type with soft case

- **XP-302M-3**
  - Aluminum case type

---

### Accessories

- **1m sampling hose type**
  - 1m sampling hose (with drain filter and probe)

- **8m sampling hose type**
  - 8m sampling hose (with float)
  - 8m sampling hose with a hose reel (with float)

- **An external alarm**
  - An external alarm (with 8m cable)
  - An external alarm with a cable reel (with 8m cable)
### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>XP-302M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gases detected</td>
<td>Combustible Gas (Methane)</td>
</tr>
<tr>
<td>Detection Principle</td>
<td>Catalytic combustion</td>
</tr>
<tr>
<td>Gas sampling method</td>
<td>Sample-draw by internal electric sampling pump</td>
</tr>
<tr>
<td>Measuring range (Service range)</td>
<td>0-100%LEL</td>
</tr>
<tr>
<td>Accuracy (Repeatability)*1</td>
<td>&lt; ±5%LEL</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Alarm set points</td>
<td>Level 1</td>
</tr>
<tr>
<td></td>
<td>Level 2</td>
</tr>
<tr>
<td>Response time*2</td>
<td>with a 1m sampling hose</td>
</tr>
<tr>
<td></td>
<td>with an 8m sampling hose</td>
</tr>
<tr>
<td>Operating temperature &amp; humidity</td>
<td>−10°C to 40°C, 95% RH (non-condensing)</td>
</tr>
<tr>
<td>Battery type</td>
<td>4 × AA Alkaline</td>
</tr>
<tr>
<td>Display</td>
<td>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).</td>
</tr>
<tr>
<td>Alarms</td>
<td>90+ dB buzzer, flashing LCD and warning lamp</td>
</tr>
<tr>
<td>Operating hours*3</td>
<td>8+ hours on 4 × AA alkaline cells (20°C, no alarm, no backlight and datalogging OFF)</td>
</tr>
<tr>
<td>Safety design</td>
<td>Intrinsically safe design Ex ibd II BT3</td>
</tr>
<tr>
<td>Functions</td>
<td>• 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</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Approx. 152 (W) × 152 (H) × 42 (D) mm</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 870g</td>
</tr>
<tr>
<td>Standard accessories**</td>
<td>XP-302M-[]-1</td>
</tr>
<tr>
<td></td>
<td>XP-302M-[]-2</td>
</tr>
<tr>
<td></td>
<td>XP-302M-[]-3</td>
</tr>
<tr>
<td></td>
<td>XP-302M-[]-4</td>
</tr>
<tr>
<td>Optional accessories**</td>
<td>• Log data download software (for Windows 2000 or XP)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*1 Under identical conditions  
*2 T90  
*3 It depends on the environmental conditions, service conditions, storage period, and battery manufacturers  
*4 A three-gas type is also available  
*5 Non explosion-proof type  
*6 Please contact our dealers / distributors for available accessories

NEW COSMOS ELECTRIC CO., LTD.  
Head Office:  
2-5-4, Mitsuya-naka, Yodogawa-ku, Osaka 532-0036, JAPAN  
TEL.+81-6-6309-1505 FAX.+81-6-6308-0371  
Tokyo Office:  
3rd floor, Towa-Hamamatsucho Bldg.,  
2-6-2 Hamamatsu-cho, minato-ku, Tokyo 105-0013, JAPAN  
TEL.+81-3-5403-2715 FAX.+81-3-5403-2710  
URL http://www.new-cosmos.co.jp

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.  

We received ISO 9001 certification for our design, manufacturing, sales, and service operations at our head office, branches and factories.  
Registered No. : JQ 064C

We obtained the ISO 14001 International Environmental Management System certification at head office.

* The information contained in this catalog is subject to change.