Includes 25 Programmed Target Gases

Portable combustible gas detector

Model GP-1000
(Manufactured in Japan)

Methane, Iso-Butane, Hydrogen, Toluene, Xylene, Alcohol etc.
25 different target gases can be selected for direct readout

Target gas is selectable
Direct reading is selectable from a list of 25 gases. Calibration to only 1 gas (CH4) is needed.

Pump booster function
Pump speed selectable from 0.3ml/min to 0.6ml/min. Gas can be sampled faster or from longer distance with higher pump rate.

Intrinsically safe
Safety rating Exia ⅡCT4 allows users to detect a gas at Zone 0 hazardous area where explosion hazards always exists.

Ingress protection rating IP67
Water proof, Dust proof construction for outdoor use meets IP67 rating.

Filters (optional) can be used with standard gas sampling probe
H2S removal filter, silicone removal filter can be installed in standard gas sampling probe. Hydrogen sulfide or silicone that would damage sensor in GP-1000 can be removed by these filters.
**Specification**

**Model**
GP-1000

**Gas detected**
Combustible gas (CH4, HC etc. Refer to the gas list)

**Sensor principle**
Catalytic combustion

**Detection range**
0 ~ 100%LEL

**Alarm types**
Gas alarm: Latching, 1st and 2nd alarm
Trouble alarm: Low flow, sensor disconnection, low battery voltage, Circuit abnormality, detection range abnormality

**Alarm methods**
Gas alarm: Intermittent buzzer, flashing lights, gas concentration reading blinks
Trouble alarm: Continuous buzzer, flashing lights, trouble condition is displayed

**Preset alarms**
1st: 10%LEL, 2nd: 50%LEL

**Indication accuracy**
Full scale ± 5% (at same condition)

**Response time**
Within 30 seconds (T90)

**Sampling method**
Sample-draw, Flow rate > 0.3L/min
(Approx. 0.6L/min for pump boosting mode)

**Indication precision**
Digital LCD with 7 segments + Bar meter (50 segment) + Status information
Digital numeral 7 segments indication: 0 / 100%LEL
Digital bar meter indication: Auto range (0 ~ 10%LEL / 0 ~ 100%LEL)
0 ~ 9%LEL (L range)
0 ~ 100%LEL (H range)

**Power source**
AA alkaline battery, 4pcs

**Continuous operation**
More than 20 hours (new battery, no alarm and no indication, at 25°C)

**Operating temp. & humidity**
Operating temperature: -20 ~ 50°C [-4 ~ 122°F]
Operating humidity: 0 ~ 95%RH (Non-condensing)
Storage temperature: -25 ~ 60°C [-13 ~ 140°F]
Storage humidity: 0 ~ 95%RH (Non-condensing)

**Dimension**
80.1 (W) x 124 (H) x 36 (D) mm (3.15 (W) x 4.88 (H) x 1.42 (D) inches)

**Weight**
Approx. 260g (9.2 oz.) (exclude alkaline battery)

**Water dust proof**
IP 67

**Safety design**
Intrinsically safety ExiaIICT4

**Approvals**
Ex-proof: IECEx, ATEX
Other: CE marking

**Function**
LCD backlight, data log, log data indication, peak indication, pump boosting, gas select

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**Target gases**

<table>
<thead>
<tr>
<th>No.</th>
<th>Gas list</th>
<th>Name indicated on LCD</th>
<th>Lower explosion limit LEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Methane</td>
<td>CH4</td>
<td>5.0vol%</td>
</tr>
<tr>
<td>2</td>
<td>Isobutane</td>
<td>i-C4H10</td>
<td>1.8vol%</td>
</tr>
<tr>
<td>3</td>
<td>Hydrogen</td>
<td>H2</td>
<td>4.0vol%</td>
</tr>
<tr>
<td>4</td>
<td>Methanol</td>
<td>CH3OH</td>
<td>5.5vol%</td>
</tr>
<tr>
<td>5</td>
<td>Acetylene</td>
<td>C2H2</td>
<td>1.5vol%</td>
</tr>
<tr>
<td>6</td>
<td>Etylene</td>
<td>C2H4</td>
<td>2.7vol%</td>
</tr>
<tr>
<td>7</td>
<td>Ethane</td>
<td>C2H6</td>
<td>3.0vol%</td>
</tr>
<tr>
<td>8</td>
<td>Ethanol</td>
<td>C2H5OH</td>
<td>3.3vol%</td>
</tr>
<tr>
<td>9</td>
<td>Propylene</td>
<td>C3H6</td>
<td>2.0vol%</td>
</tr>
<tr>
<td>10</td>
<td>Acetone</td>
<td>C3H6O</td>
<td>2.15vol%</td>
</tr>
<tr>
<td>11</td>
<td>Propane</td>
<td>C3H8</td>
<td>2.0vol%</td>
</tr>
<tr>
<td>12</td>
<td>Butadiene</td>
<td>C4H6</td>
<td>1.1vol%</td>
</tr>
<tr>
<td>13</td>
<td>Cyclopentane</td>
<td>C5H10</td>
<td>1.4vol%</td>
</tr>
<tr>
<td>14</td>
<td>Benzene</td>
<td>C6H6</td>
<td>1.2vol%</td>
</tr>
<tr>
<td>15</td>
<td>n-Hexane</td>
<td>n-C6H14</td>
<td>1.2vol%</td>
</tr>
<tr>
<td>16</td>
<td>Toluene</td>
<td>C7H8</td>
<td>1.2vol%</td>
</tr>
<tr>
<td>17</td>
<td>Heptane</td>
<td>n-C7H16</td>
<td>1.1vol%</td>
</tr>
<tr>
<td>18</td>
<td>Xylene</td>
<td>C8H10</td>
<td>1.0vol%</td>
</tr>
<tr>
<td>19</td>
<td>Ethyl acetate</td>
<td>EtAc</td>
<td>2.1vol%</td>
</tr>
<tr>
<td>20</td>
<td>IPA</td>
<td></td>
<td>2.0vol%</td>
</tr>
<tr>
<td>21</td>
<td>MEK</td>
<td>MEK</td>
<td>1.8vol%</td>
</tr>
<tr>
<td>22</td>
<td>Methyl methacrylate</td>
<td>MMA</td>
<td>1.7vol%</td>
</tr>
<tr>
<td>23</td>
<td>Dimethylether</td>
<td>DME</td>
<td>3.0vol%</td>
</tr>
<tr>
<td>24</td>
<td>Methyl isobutyl ketone</td>
<td>MIBK</td>
<td>1.2vol%</td>
</tr>
<tr>
<td>25</td>
<td>Tetrahydrofuran</td>
<td>THF</td>
<td>2.0vol%</td>
</tr>
</tbody>
</table>

**Sensitivity curve for 25 gases is originally loaded in GP-1000.**
**Target gas can be switched by button operation.**

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**Standard accessory**

- Hand strap
- Sampling probe (with water trap function)

**Optional accessory**

- Carrying case
- Protection film
- Cartridge filter + Silicone removal + GIS removal
- Data logger management program

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