**Features**

- Industrial Standard, 4 - 20 mA O/P With Respect To Gas Concentration
- Loop Test, Assures Proper Operation Of The Transmitter Without Calibration Gas
- Power On Startup Through Intelligent Electronic, Self Driven Menu
- Microcontroller Based Software Calibration - No Trim Pots
- Calibration Possible In Atmospheric Air
- Easy Programming With Password Protection
- Easy-to-read Display, Fast Response
- Easy To Replace Sensor At The Field-plug-in Module
- Built-in Reverse Polarity Protection
- No Additional Power Required
- Highly Reliable, Fast, Accurate For Specific Gas Detection
- Excellent Long Term Stability
- User Friendly, Simple To Operate & Easy To Install
- Reduced Operating, Maintenance And Installation Cost, One Man Calibration
- Suitable In Hazardous Area IIA, IIB, CMRI & IP-65 Approved
- Ready To Use With Any DCS, PLC & AMBETRONICS Controllers
- Digital Filter to smooth input signal

**Applications**

- Pulp & Paper Plants
- Chemical & Petrochemical Plants
- Acid Alkalizes & Dyes Mfg. Plants
- Chemical Processing Plant
- Offshore Drilling & Processing Platforms
- Refineries
- Stack Monitoring
- Chemical Storage Area
- Ambient Monitoring
- Sewage Plants
- Fertilizers Plants
- Power & Industrial Plants
- Gas Metering Station
- Bullet Yard / Storage Yard
- Oil and Gas industries
- Coal Mine and Confined Area
- Gas Pipeline Project

**GT - 1000 SERIES**

**LOOP POWERED GAS TRANSMITTER**

**OXYGEN / TOXIC GASES**

**GT - 1000 - WP**

**GT - 1000 - FLP**

**MUST FOR HUMAN AND INDUSTRIAL SAFETY**
**INPUT**

Oxygen / Toxic gases, Please select from the Table

**Range / Resolution**

As specified in the Table

**Accuracy**

± 2% of the full scale value

**Sensor type**

Electrochemical sensor, Imported make

**Sensor life**

Expected 24 months

**Loop output**

Industrial standard 4-20mA DC O/P with permissible load 650 ohm at 24 VDC, 25mA

**Display**

0.5", 3½ digit LCD Display

**Set point**

Two independent set point, LO & HI with blinking indication with programmable latch & non-latch

**Setting**

Setting by 3 keys on front panel i.e. ‘SET / NEXT’, ‘INCR’, ‘DECR’

**Monitoring**

i) By Display : Over range Shows “Err” Indication

ii) By loop current : Up scale current : 20mA, Down scale current : 4mA, Selectable

**Supply Voltage**

14VDC to 36VDC

**Cable**

1.5 sq. mm 2 Core, Flexible OR Armoured shielded cable

**Operating Temperature**

0 to 50°C ± 5%, Relative humidity: Below 95% non condensing

**Sensor Housing**

P.V.C. / P.P. / TEFLEXON material / SS304 / SS316, Please specify while ordering

**GT - 1000 - WP**  (Weatherproof)

**GT - 1000 - FLP**  (Flameproof)

**Protection Class**

IP-65

IP-65 for Gas Gr. IIA & IIB, & CMRI Approved

**Cabinet Material**

Polycarbonate, grey colour

Cast Aluminium alloy, LM-6 / C.I. Enclosure

**Cable Entry**

1 No, Thermoplastic cable gland (IP 68)

1 No. Double compression cable gland (Ex-Proof), ¾“ ET type

**Dimension**

160mm(H) x 110mm(W) x 60mm(D)

190mm (H) x 200mm (W) x 100mm (D)

**Mounting**

Wall Mounting / Stand Mounting

Wall Mounting / Stand Mounting

**Weight**

250 Grams

1Kg

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**LIST OF GAS TRANSMITTERS WITH RANGES & RESOLUTION**

<table>
<thead>
<tr>
<th>SR.</th>
<th>GASES</th>
<th>RANGE</th>
<th>RESOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Oxygen</td>
<td>0-25% Vol.</td>
<td>0.1</td>
</tr>
<tr>
<td>2</td>
<td>Oxygen</td>
<td>0-100% Vol.</td>
<td>0.1</td>
</tr>
<tr>
<td>3</td>
<td>Nitrogen Dioxide(NO)</td>
<td>0-100 PPM</td>
<td>1.0</td>
</tr>
<tr>
<td>4</td>
<td>Nitric Oxide (NO)</td>
<td>0-50 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>5</td>
<td>Sulphur Dioxide (SO)</td>
<td>0-20 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>6</td>
<td>Chlorine (Cl)</td>
<td>0-10 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>7</td>
<td>Carbon Monoxide (CO)</td>
<td>0-2000 PPM</td>
<td>1.0</td>
</tr>
<tr>
<td>8</td>
<td>Hydrogen Sulphide (HS)</td>
<td>0-200 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>9</td>
<td>Hydrogen Cynide (HCN)</td>
<td>0-10 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>10</td>
<td>Hydrogen Chloride (HCL)</td>
<td>0-50 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>11</td>
<td>Ammonia (NH₃)</td>
<td>0-50 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>12</td>
<td>Ozone (O₃)</td>
<td>0-2 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>13</td>
<td>Ethylene Oxide C₂H₃O</td>
<td>0-20 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>14</td>
<td>Phosgene (Ph₃)</td>
<td>0-5 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>15</td>
<td>Hydrogen (H₂)</td>
<td>0-1000 PPM</td>
<td>1.0</td>
</tr>
<tr>
<td>16</td>
<td>Phosgene (COCl₂)</td>
<td>0-1 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>17</td>
<td>Fluorine (F₂)</td>
<td>0-100 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>18</td>
<td>Hydrogen Fluoride (HF)</td>
<td>0-50 PPM</td>
<td>0.1</td>
</tr>
<tr>
<td>19</td>
<td>Hydrogen Bromide (HBr)</td>
<td>0-10 PPM</td>
<td>0.1</td>
</tr>
</tbody>
</table>

* Please specify if any other Gases (Available on request)

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**TECHNICAL SPECIFICATIONS**

**SR.**

GASES

RANGE

RESOLUTION

**1**

Ammonia (NH₃)

0-50 PPM

0.1

**2**

Ozone (O₃)

0-2 PPM

0.1

**3**

Ethylene Oxide C₂H₃O

0-20 PPM

0.1

**4**

Phosgene (Ph₃)

0-5 PPM

0.1

**5**

Hydrogen (H₂)

0-1000 PPM

1.0

**6**

Phosgene (COCl₂)

0-1 PPM

0.1

**7**

Fluorine (F₂)

0-100 PPM

0.1

**8**

Hydrogen Fluoride (HF)

0-50 PPM

0.1

**9**

Hydrogen Bromide (HBr)

0-10 PPM

0.1

**LAYOUT DESCRIPTION**

**WEATHERPROOF ENCLOSURE DIMENSIONS**

**SIDE VIEW**

60mm (D)

110mm (W)

**BACK VIEW**

3mm x 4mm

50 mm

**FLAMEPROOF ENCLOSURE DIMENSIONS**

**SIDE VIEW**

190 mm (H)

100 mm (D)

**BACK VIEW**

55 mm

95 mm

200 mm (W)

**FRONT DESCRIPTION**

Weatherproof

Enclosure

Digital LCD Display for

Gas Concentration

Programming

Key Pad

Sensor Head

Thermoplastic

Cable Gland

Manufactured by:

AM BETRONICS ENGINEERS PVT. LTD.

17-B, Tarun Industrial Estates, Mogra Pada, New Nagardas Road, Andheri (E) Mumbai - 69, India.

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E-mail : project@ambetronics.com • gas@ambetronics.com • Web : www.ambetronics.com

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