GT-2511-FLP

SMART GAS TRANSMITTER
FOR OXYGEN / TOXIC / COMBUSTIBLE GASES

• Approval & Compliance for Flameproof:
  Certified to EX-d IIC, IP66
  Standard Compliance:
  • IS/IEC 60079-0: 2004
  • IS/IEC 60079-1: 2007
  • IS/IEC 60529: 2001

Features
- Provides a fast and reliable output by using Electro Chemical / Pelister Sensor Technology.
- Optimized for detection of smallest leak of Oxygen, Toxic and Combustible Gases.
- Highly resistant to poisoning and etching.
- Capable of detecting down to PPM, %LEL & %V/V.
- Digital display of Gas Concentration on LCD Display
- Standard 4-20mA signal output with configurable range.
- Non-Intrusive programming for Flameproof model using Magnetic pen.
- Password protected programming with password changing facility.
- One man Auto Software Gas Calibration.
- Optional Alarm relay contacts with two configurable Alarm levels & one Relay for fail safe relay.
- Optional STEL and TWA set points can be configured for Toxic Gases.
- Optional RS-485 communication port with MODBUS RTU Protocol.

Applications
- Gas Metering skid
- Gas Cylinder Bank
- Oil & Gas Industries
- Gas Pipeline Project
- Refineries
- Cold Storage
- Sewage Plants
- Fertilizers Plants
- Stack Monitoring
- Chlorination Plant
- Ambient Monitoring
- Pulp & Paper Plants
- Gas Metering Station
- Burner / Furnace Areas
- Bullet Yard / Storage Yard
- Chemical Processing Plant
- Acid Alkalizes & Dyes Mfg. Plants
- Offshore Drilling & Processing Platforms
- Heat Treatment Plants
- Chemical Storage Area
- Control Atmosphere
- Power & Industrial Plants
- Coal Mine and Confined Area
- Chemical & Petrochemical Plants
- Automotive Industries / Paint Shops

MUST FOR HUMAN AND INDUSTRIAL SAFETY
### General:
- Detection Method: Electrochemical / Catalytic Bead Pellistor / Siegitor
- Gases Detected: Oxygen / Toxic / Combustible / VOC
  (Please select from the table below).
- Display: 8x2 Alphanumeric LCD Display with Backlit & 8 LEDs to indicate status of instrument
- Control Action: i) Two independent Alarm set points with Latch & Non-latch facility.
  ii) User selectable Hysteresis and Logic option.
  iii) Configurable STEL and TWA set points for Toxic Gases (optional).
- Setting: By using Magnetic pen for Flameproof model
- Alarm: Buzzer & Flasher for Alarm Indication
- Performance:
  - Accuracy: ±2% of Full Scale.
  - Response Time: T20 < 18 Seconds
  - T50 < 22 Seconds
  - T90 < 40 Seconds
  - Start-up Time: Less than 30 Seconds.
- Electrical:
  - Supply Voltage: 18 to 36 VDC, Typically 24VDC
  - Power Consumption: Less than 3.6 Watts.
  - Cable: 3 Wires (1.5 mm²) Flexible or Armoured Shielded Cable
- Environmental:
  - Operating Temperature: -15°C to +55°C
  - Storage Temperature: -10 to +60°C
  - Humidity: Less than 95% Non-Condensing.

### Output Signal:
- Standard: 4-20mA Current Output with configurable range selection
  with power with 470 ohm load driving capacity.
- Optional: Three SPDT Relays (one for FailSafe and Two for Alarm indication) of rating ‘2A/120VAC, 2A/24VDC’.
- Optional: RS-485 Communication port with MODBUS RTU protocol.

### Error Monitoring:
- i) During Sensor Break / Open, the Display shows ‘SENSOR OPEN’ & 4-20mA output goes down to 3.7mA for Combustible gases only.
- ii) During Over range, the Display shows ‘OVER RANGE’ & 4-20mA output goes up to 21mA

### Accessories (Optional):
- • CE certified 24 VDC Power supply.
- • Gas Sampling & Conditioning System.
- • Canopy & Mounting stand.
- • Gas Calibration Kit (0.5, 1, 3, 10)Liter.
- • PC Based SCADA Software, Modem, Hooter Cum Flasher.

### Technical Specifications
- Standard: 4-20mA Current Output with configurable range selection
- Optional: Three SPDT Relays (one for FailSafe and Two for Alarm indication) of rating ‘2A/120VAC, 2A/24VDC’.
- Optional: RS-485 Communication port with MODBUS RTU protocol.

### Flameproof Housing:
- Protection Class: IP-66
- Cabinet Material: Cast Aluminium alloy, LM-6
- Cable Entry: Double compression cable gland (Ex-Proof ) M20 X 1.5P
- Dimension: 190mm (H) with sensor holder x215mm (W) with stopper plug & cable gland x 125mm (D)
- Mounting: Wall Mounting / Stand Mounting / Pipe Mounting
- Weight: Approx 2.53kg

### LIST OF GAS TRANSMITTERS WITH RANGES & RESOLUTION

<table>
<thead>
<tr>
<th>S.N.</th>
<th>GASES</th>
<th>RANGE</th>
<th>UNIT</th>
<th>RES.</th>
<th>S. N. GASES</th>
<th>RANGE</th>
<th>UNIT</th>
<th>RES.</th>
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</thead>
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<tr>
<td>01</td>
<td>Oxygen (O₂)</td>
<td>25</td>
<td>%Vol.</td>
<td>0.1</td>
<td>015 Hydrizine (N2H4)</td>
<td>1</td>
<td>PPM</td>
<td>0.01</td>
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<tr>
<td>02</td>
<td>Oxygen (O₂)</td>
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<td>%Vol.</td>
<td>0.1</td>
<td>018 Bromine (Br2)</td>
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<td>019 Hydrogen Fluoride (HF)</td>
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<td></td>
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<td>T21 Methane (CH₄)</td>
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<td>T22 Butane/n-Butane(CH₃₂)</td>
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<td>T24 Acetylene (C₂H₂)</td>
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<td>T28 Chlorine (CL₂)</td>
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<td>T29 Hydrogen Chloride (HCL)/Hydrogen Bromide (HBR)</td>
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<td>T33 Pentane/n-Pentane(CH₃₅)</td>
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<td></td>
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<td>T34 Flammable (Explosive) Gas</td>
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<td>012 Acetone (CH₃CO)</td>
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<td>013 Ethanol (C₂H₅OH)</td>
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<td>014 Ethyl Acetate(CH₃COOC₂H₅)</td>
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<td>015 Ethylene (C₂H₄)</td>
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<td>016 Hydrogen (H₂)</td>
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<td>017 Isopropanol (CH₃CH₂OH)</td>
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<td>018 Methanol (CH₃OH)</td>
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<td>019 Methyl ethyl ketone(CH₃COCH₃)</td>
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<td>020 N-hexane (C₆H₁₂)</td>
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<td>021 N-pentane (C₅H₁₀)</td>
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<td>022 N-octane (C₈H₁₈)</td>
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<td>023 Toluene (C₆H₄CH₃)</td>
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<td>024 Ammonia (NH₃)</td>
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<td>025 Carbon Monoxide (CO)</td>
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</tbody>
</table>

### Ordering Information
- Before placing order please Refer the above ordering information or Contact below address for assistance.

**Ambetronics Engineers Pvt. Ltd.**

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Manufactured by:

Ambetronics Engineers Pvt. Ltd.

Version: GT-2511-R1-14-05-2018

*Specifications subject to change without any prior notice.*

*Please specify if any other gases & Gas range you require which is not in the list (Available on Request).*