

**AT-EG01****Gas Detector****Real-Time Monitoring for Industrial and Commercial Safety**

The AT-EG01 series is a robust and versatile fixed gas detector designed for reliable monitoring of combustible and toxic gases in demanding environments. Featuring a modular design, multiple output options, and an intuitive interface, it ensures safety, simplifies maintenance, and provides seamless integration into your control system.

**Product Overview**

The AT-EG01 series gas detector offers continuous monitoring of gas concentrations in the surrounding atmosphere. Equipped with different sensor technologies to target specific gases, it is the ideal solution for safeguarding personnel and assets in a wide range of industrial and commercial applications.

### Key Features & Benefits

**High-Resolution Display:** Real-time concentration and alarm status displayed on a color-breaking screen for excellent visibility.

**Multiple Output Options:** Configurable with 4-20mA analog signal, RS485 (ModBus RTU), and relay outputs for flexible system integration.

**Robust Construction:** Die-cast aluminum housing with IP66 rating and Explosion-Proof certification (Exd II CT6), ensuring durability in harsh and hazardous areas.

**Intelligent Calibration:** Supports multi-point calibration for superior accuracy and linearity over the sensor's lifetime. Features easy data backup and one-button reset.

**Advanced Alarming:** Two-level alarm system with configurable output modes (Standard or Pulse) to automatically trigger external devices like fans or solenoid valves.

**Modular Design:** Simplifies wiring, maintenance, and potential sensor replacement, reducing downtime

### Technical Specifications

Parameter	Specification
<b>Detection Principle</b>	Catalytic Combustion, Electrochemical, Infrared, Semiconductor, or Photoionization (PID)
<b>Target Gas</b>	As specified on the product nameplate (Combustible or Toxic Gases)
<b>Power Supply</b>	DC 24V
<b>Output Signals</b>	<ul style="list-style-type: none"><li>• 4-20mA Analog Output</li><li>• RS485 Digital Communication (ModBus RTU Protocol)</li><li>• Passive Relay Contact (250V AC, 2A Max)</li></ul>
<b>Display &amp; Interface</b>	High-Resolution Color-Breaking Screen with Menu Navigation Buttons
<b>Housing Material</b>	Die-cast Aluminum
<b>Protection Rating</b>	IP66
<b>Explosion-Proof Rating</b>	Ex d II C T6
<b>Conduit Connection</b>	M20 x 1.5 Internal Thread
<b>Operating Environment</b>	Temperature: -40°C to +70°C Humidity: 10% to 93% RH (Non-condensing) Pressure: 86 kPa ~ 106 kPa
<b>Dimensions (H x W x D)</b>	185 mm x 143 mm x 82 mm
<b>Weight</b>	≤ 1.5 kg
<b>Sensor Life</b>	2-3 years in clean air (typical)
<b>Standards Compliance</b>	GB15322.1-2019, GB12358-2006, GB3836.1-2010, GB3836.2-2010



## **Application Areas**

The AT-EG01series is suitable for installation in both hazardous and non-hazardous areas within Class II explosion-proof environments

**Oil & Gas** Platforms, Refineries, Pipelines

**Chemical & Pharmaceutical** Processing Plants, Storage Facilities

**Utilities** Wastewater Treatment, Gas Distribution

**Manufacturing** Paint Booths, Battery Rooms, Industrial Ovens

**Commercial** Parking Garages, Laboratorie

## **Installation & Maintenance**

**Installation:** The mounting position (near the leak point) is determined by the gas density relative to air. Sensors should face downward.

**Calibration:** Requires periodic zero and span calibration. Intervals should not exceed one year to ensure accuracy.

**Maintenance:** Annual inspection is recommended. The modular design allows for easy servicing and sensor replacement.