ATLAS

EXPLOSION PROOF TYPE INTERFERENCE GAS FILTERING GAS DETECTOR

The ATLAS is an intelligent, explosion-proof gas detector designed for precise detection of combustible gases, toxic gases, freon, and VOCs in hazardous environments. Featuring a high-performance pump, it quickly samples and identifies gases in designated areas, ensuring rapid response and increased safety.

Optimized for advanced industrial applications such as semiconductor manufacturing, ATLAS applies a specialized filtering algorithm to effectively manage PM materials and other airborne contaminants. With support for 4–20 mA, RS-485, and PoE communication, along with built-in relay contacts, ATLAS enables flexible integration and enhanced operational control in any gas monitoring system.

FEATURES AND BENEFITS

Multi-Gas Detection Capability

Capable of detecting combustible gases, toxic gases, freon, and VOCs, making it suitable for diverse industrial applications.

High-Performance Sampling Pump

Rapidly draws and analyzes air samples from designated areas for fast and accurate detection.

Advanced Filtering Algorithm

Applies specialized filtering optimized for semiconductor processes, effectively handling PM materials and other contaminants.

Versatile Communication Options

Supports 4–20 mA, RS-485, and PoE for flexible integration into various monitoring and control systems.

Explosion-Proof Construction

Designed with a flameproof enclosure to prevent secondary explosions in hazardous environments.

Built-in Relay Contacts

Provides enhanced control for safety systems and automation through relay output functionality.

DETECTOR SPECIFICATIONS

Measuring type	Auto sampling type
Accuracy	±3% / Full scale
Parameter control	Non intrusive control with a Magnet bar (Calibration, Maintenance, Alarm setting)
Operation mode display	ATLAS : Alarm / Trouble LED flow rate | LED indicator (Power, 2-Stage alarm, 1-Trouble) ATLAS LCD Version : 2.0" Color TFT LCD (Detector status, Gas info, Error code etc.) | LED indicator (Power, 2-Stage alarm, 1-Trouble)
Measuring value display	ATLAS: FND display (4-Digit) | ATLAS LCD Version : 2.0" Color TFT LCD (Gas value, Flow rate etc.)
Alarm signal output	3.5A@30VDC, 3.5A@125VAC (Resistive load) / 3-SPST Relay contact (2-Stage alarm, 1-Trouble)
Output signal	Analog 4-20mA, Relay, RS-485 Modbus (Option), PoE (Option)
Sampling method	Diaphragm pump
Sampling line	OD 1/4 "(Standard)
Flow rate	0 ~ 1000mL/min (Normal 500mL/min)
Material	Aluminum alloy
Conduit connection	Standard : PF 3/4" | Option : NPT 3/4" M25 | PF 1/2" NPT 1/2" M20 (With Explosion proof reducer)
Mounting type	Wall mount
Operating temperature	-10 ~ 60 °C
Operating humidity	5 ~ 99% RH (Non-condensing)
Dimensions	200(W) × 161(H) × 139(D) mm
Weight	4kg
Operating power	Standard type : 9.6W @24VDC (Max) PoE type : 10.1W @48VDC (Max)

DETECTOR CERTIFICATIONS

Explosion-Proof Certification	KCs	Korea Explosion Proof Certification	Ex d IIC T6
	IECEx	International Explosion Proof Certification	Ex db IIC T6/T5 Gb
	ATEX	European Explosion Proof Certification	Ex db IIC T6/T5 Gb
	NEPSI	China Explosion Proof Certification	Ex db IIC T5/T6 Gb
	UL	U.S. Explosion Proof Certification	Class I, Division 1, Groups A,B,C,D
	TS	Taiwan Explosion Proof Certification	Ex db IIC T6/T5
Other Certifications	KC	Korea Electromagnetic Certification	-
	CE(EMC)	European Electromagnetic Certification	
	-	Thailand Ministry of Energy Certification	
	CPA	China Measuring Instrument Certification	
	KFI	Korea Fire Safety Certification	

ATLAS
EXPLOSION PROOF TYPE INTERFERENCE
GAS FILTERING GAS DETECTOR

SENSOR SPECIFICATIONS

Measuring Method	Measurable gas	Measuring range	Response time
Infrared	Freon gas	0 ~ 2000ppm	< 15sec / 90% scale
	Flammable gas	0 ~ 100% LEL	< 15sec / 90% scale
	Toxic gas	*	< 15sec / 90% scale
	Precursor gas	*	< 15sec (Default) < 50sec (TEOS, OMCTS)
Catalytic cell	Flammable gas	0 ~ 100% LEL	< 15sec / 90% scale
Hot wire semiconductor cell	Flammable gas	0 ~ 2000ppm	< 20sec / 90% scale
Thermal conductivity cell	Flammable gas	*	< 15sec / 90% scale
Galvanic cell	O_2	*	< 15sec / 90% scale
Electrochemical cell	O_2	*	< 15sec / 90% scale
	Toxic gas	*	< 45sec (Default) / < 60sec (O_3) < 70sec (HCl) / < 100sec (HF)
Photo-Ionization Detector(PID)	VOC gas	*	Varies by gas

* = Refer to Toxic gas measuring range

FOR MORE INFORMATION
www.watchgas.com
info@watchgas.com

Distributed by