MDA Scientific MIDAS®

Honeywell





Simple gas detection for fast and reliable response to the presence of gases used in the Semiconductor manufacturing industry







Features:

- Over 35 gases available with extended 2 year warranty*
- Smart sensor cartridge with on board 'e-calibration' certificate
- 3 built in relays (Form C) for Alarm 1, 2 and Fault
- Power over Ethernet (PoE) communication
- Keypad Interface and remote Web Browser Interface
- Pyrolyzer module that connects to any transmitter
- Password protected menu levels to preserve system integrity
- Bright LEDs and intuitive lcon Driven, large backlit LCD display
- Factory-calibrated sensors to reduce need for frequent gas testing
- Isolated 0-22 mA Analog Output with fault and event reporting
- Modbus/TCP Ethernet for easy connectivity to all control and alarm systems ports for control connectivity and service interaction
- Robust extractive pump system (2 year lifetime) sampling up to 30m
- CE marked for total immunity to Radio Frequency Interference
- Reflex® sensor health check for improved safety
- TempraSure[™] temperature compensation technology as appropriate
- Event logging to review sensor history

MIDAS offers lower cost of ownership benefits for gas detection through a combination of extended sensor calibration periods, flexible communications architecture and patented diagnostics that monitor sensor performance and flow control.

MIDAS is a universal transmitter platform that detects the majority of toxic, ambient and flammable gases that must be monitored in the Fab. Bright LED lights and an intuitive, icon driven interactive menu guarantee instant alert to the gas reading or alarm level coupled with password protected menus for configuration, test and calibration.

MIDAS is compact in size and its easy access metal chassis design makes it simple to install in crowded, increasingly complex process environments or retro fit applications where space is at a premium.

MIDAS will monitor points up to 100 feet (30 meters) away from the transmitter and flow rates are regulated automatically using patented control technology to ensure error free gas sensing operation. Honeywell designs and manufactures its own sensors using advanced robotics to ensure unbeatable quality and reliability.

MIDAS is complemented by the innovative Chemcassette® range of ultra sensitive low ppb toxic gas detection analyzers and our worldwide network of service engineers who operate on a 24/7 basis.



^{*} standard 1 year warranty

Flexible Features and Options





MIDAS Transmitter

With a number of flexible features and options, MIDAS works right out of the box and configures easily to meet your needs. The pre-calibrated 'plug-and-play' smart sensor cartridge means the instrument will be ready to commission when you're ready, thus saving sensor life. It makes sensor replacement quick and easy to manage with no tools required, and prevents any operator error associated with using incorrect or depleted sensors.

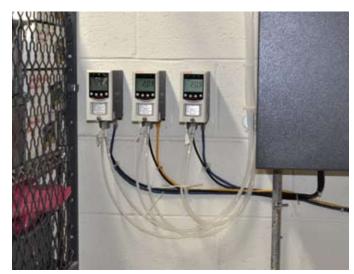
MIDAS has flexible power and communications built in as standard including 3 on-board relays, 0 - 22mA analog output, Modbus/TCP Ethernet digital outputs, as well as the innovative Power over Ethernet (PoE) protocol — a single Ethernet connection for all power, control and communication requirements. Cost effective integration with PLC and Fieldbus systems is greatly simplified with the MIDAS architecture.

Gas Name	Chemical Formula
Ammonia	NH ₃
Arsine	AsH₃
Boron Trichloride	BCl ₃
Boron Trifluoride	BF₃
Bromine	Br ₂
Carbon Dioxide	CO ₂
Carbon Monoxide	CO
Chlorine	Cl ₂
Chlorine Dioxide	CIO ₂
Diborane	B ₂ H ₆
Dichlorosilane	H ₂ SiCl ₂
Difluoromethane*	CH ₂ F ₂
Disilane	Si ₂ H ₆
Fluorine	F ₂
Germane	GeH ₄
Hexaflourobutadiene*	C ₄ F ₆
Hydrogen (% LEL)	H ₂
Hydrogen (ppm)	H ₂
Hydrogen Bromide	HBr
Hydrogen Chloride	HCI
Hydrogen Cyanide	HCN
Hydrogen Fluoride	HF
Hydrogen Sulfide	H ₂ S
Methane (% LEL)	CH ₄
Methyl Flouride*	CH₃F
Nitric Oxide	NO
Nitrogen Dioxide	NO ₂
Nitrogen Trifluoride*	NF ₃
Octoflourocyclopentene*	C ₅ F ₈
Oxygen	O ₂
Ozone	O ₃
Phosphine	PH₃
Silane	SiH ₄
Sulfur Dioxide	SO ₂
Sulfur Hexaflouride*	SF ₆
Tetra Ethyl Ortho Silicate	TEOS
Tungsten Hexafluoride	WF ₆

^{*} Gases require MIDAS Pyrolyzer

MIDAS Pyrolyzer

Offered as an option, the MIDAS Pyrolyzer allows for the detection of NF_3 and other CFX gases, and provides a number of benefits. Cost of ownership is low as the pyrolyzer has a replaceable heater assembly with a lifespan of greater than two years. The pyrolyzer design uses our new proprietary catalyst to improve gas conversion efficiency, which along with automatic flow control and temperature control, gives fast and accurate performance. Additionally, the pyrolyzer can be run from a MIDAS powered by either PoE or 24 VDC.



MIDAS Installation



MIDAS & MIDAS Pyrolyzer



Alarm System used with MIDAS

Honeywell Analytics Lines of Business







Commercial

Gas detection from standalone units to fully engineered, multi-point systems, all offering cost-effective regulatory compliance

» Applications: parking structures, chillers, mechanical rooms, office towers, commercial buildings, shopping centers, swimming pools, golf courses, schools and universities, laboratories

Industrial

Renowned Sieger and Manning gas detection systems with advanced electrochemical, infrared and open path sensing technologies

» Applications: oil and gas, cold storage, water/wastewater treatment, chemicals, engine rooms, plastics and fibers, agriculture, printing and light industrial

Portables Single or multi-

Single or multi-gas Lumidor and other premium detectors with compact, lightweight designs ranging from simple alarm only units to advanced, fully configurable and serviceable instruments

» Applications: underground utility and electricity ducts, boiler rooms, post-fire sites, sewers, industrial plants, industrial hygiene, first responder teams, remote fleets





Find out more

www.honeywellanalytics.com

Contact Honeywell Analytics:

Americas

Honeywell Analytics, Inc. 405 Barclay Blvd. Lincolnshire, IL 60069 USA

Tel: 847.955.8200 Toll-free: 800.538.0363 Fax: 847.955.8210 detectgas@honeywell.com

Technical Services

ha.service@honeywell.com

www.honeywell.com

High Tech/Government

A complete portfolio of gas and chemical detection instrumentation including infrared spectroscopy (MST) with no cross interference, to Chemcassette paper-based solutions (MDA Scientific) offering detection down to parts per billion

» Applications: semiconductor manufacturing and nanotechnology, aerospace propulsion and safety, specialty chemicals industry, research laboratories, emergency response

Europe, Middle East, Africa

Life Safety Distribution AG Weiherallee 11a CH-8610 Uster Switzerland Tel: +41 (0)44.943.4300

Tel: +41 (0)44.943.4300 Fax: +41 (0)44.943.4398 gasdetection@honeywell.com

Technical Services

24/7 global network includes post-sales service and Systems Integration teams

- » Emergency call out, service contracts, on/off-site repair, training and commissioning
- Complete range of spares, consumables and accessories

Asia Pacific

Honeywell Analytics, Asia Pacific #508, Kolon Science Valley (1) 187-10 Guro-Dong, Guro-Gu Seoul, 152-050

Korea

Tel: +82 (0)2.2025.0307 Fax: +82 (0)2.2025.0329 analytics.ap@honeywell.com

Please Note:

While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract.

