

HONEYWELL

MIDAS[®] EX

Single-Point Gas Detection System

Explosion-Proof Extractive Single-Point Gas Detection for Reliability and Improved Safety

Midas[®] EX is an explosion resistant extractive single-point gas detector sampling system that can draw either a sample locally or from a remote point to a sensor cartridge inside the detector's chassis. A wide range of Asphyxiant, Toxic, Flammable, Pyrophoric, Corrosive and Oxidizer (including Oxygen) gas sensor cartridges are available to detect gases used or generated in Semiconductor Manufacturing and other industries.

A simple-to-use 4-button keypad located under the display enables set up, review operation and make changes to the detector's configuration. Midas EX offers a wall mounted feature and displays gas concentration, alarm, fault and status information through its backlit LCD and LEDs.

The Midas EX has flexible power and communications capabilities built in as standard. These include 3 on board relays, 0-21 mA analog output, Power over Ethernet (PoE) and Modbus/TCP outputs for signal and service connectivity, enabling a single Ethernet connection



APPLICATIONS

- Semiconductor processing
- Light industrial manufacturing
- University laboratories
- Aerospace
- Wastewater

FEATURES



RELAY REMOTE CONTROL

The Midas EX relay is controlled remotely with a TCP/IP-based MODBUS command. This refers to the ability to collect and control gas values from remote locations (user PCs, etc.) for relay output..



EASY INSTALLATION

Compact in size, making it suitable for crowded, complex process environments where space is at a premium, the Midas EX Gas Detector is simple to install with its plug-and-play capability



NO CALIBRATION

Factory-calibrated sensors reduce the need for frequent gas testing..



POE PROTOCOL

The detector includes the innovative Power over Ethernet (PoE) protocol – a single Ethernet connection for all power, control and communication requirements.



SURE CELL

The sensor measures the stably and accurately through temperature compensatio, concentration accuracy and checks the status by Reflex.



CLEAR VISIBILITY

The Midas EX Gas Detector is equipped with larger graphics display screen for better viewability and instrument status icons, monitoring point and location name that provides instant alerts to gas readings or alarm levels



EXPLOSION PROOF CERTIFICATION

IECEX(IEC 60079-0:2017, IEC 60079-1:2007-04) KCs

MIDAS[®] EX SPECIFICATION SHEET

PHYSICAL	
Size (unit with Sensor)	222(W) x 161(D) x 134(H) mm(8.74 x 6.34 x 5.27)
Weight (unit with Sensor)	3.25Kg(7.16 lb)
POWER REQUIREMENTS	
Operating Voltage	24 V Nominal -15 to +10% (20.4 to 26.4 VDC)
Operating Voltage with Power over Ethernet	48 VDC Power-over-Ethernet (IEEE 802.3af compliant)
POWER CONSUMPTION	
Transmitter unit	< 5 W
OUTPUTS	
Visual	Alarm, power and fault LEDs plus LCD with all gas readings and events
Relays	Alarm1, Alarm2, Fault Relays (3) rated 1.0 A @ 30VDC or 0.5 A @ 125 VAC max 10 uA @ 10 mV minimum, configurable as normally open or closed, latched or unlatched.
Analog	3 wire sink, 3 wire source, or 4 wire fully isolated; 0 to 21 mA.
Digital Communications	Modbus / TCP Ethernet / Power over Ethernet (PoE)
CERTIFICATION & SPECIFICATION	
Explosion Proof	IECEx(IEC 60079-0:2017, IEC 60079-1:2007-04), KCs
EMC	EN 61000-6-4:2007+A1:2011 EN 50270:2015+AC:2016
RESPONSE TIMES	
Typically	Refer to Individual Cartridge Datasheets
TRANSPORT SYSTEM	
Flow rate	500 cc/min
Maximum pressure	(75.8 kPa maximum pressure/vacuum at inlet and exhaust points)
Transport Time	2 – 30 seconds maximum
Performance	LDL < LAL LAL = ½ TLV (typically 12% FSD) FSD = Typically 4 x TLV
SAMPLING DISTANCE	
Tubing Length	Up to 30 m (100 feet) with FEP tubing (refer to section B, Gas Tables)
Ambient Point	In line air filter required
Exhaust Length	Up to 30 m (100 feet)
OPERATING TEMPERATURE	
Transmitter Unit	-20°C to 60°C (In explosion hazard atmosphere, 0°C to 40 °C)
Unit with sensor cartridge	0°C to 40°C (32°F to 104°F)
Ambient Temperature	0 °C to 40°C
Marking	Ex db IIC T6 Gb
TUBING REQUIREMENTS	
Sample	6.35 mm OD (1/4") x 3.18 mm (1/8"), FEP, 30 m (100 feet) maximum dependent on gas type
Exhaust	6.35 mm (1/4") OD x 4.76 mm (3/16"), Polypropylene 30 m (100 feet) maximum
WIRING REQUIREMENTS	
4- 20mA	2 wire, 14 AWG maximum
Digital	CAT5 cable or equivalent; RJ45 connector
GAS CONCENTRATION DISPLAY & INTERFACE	
Instrument	4-digit alphanumeric display with separate units, flow rate bar graph and other icon driven indicators. 4 switch interface
Remote	Option for PC / PDA Internet browser access via Ethernet
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WARRANTY	
Transmitter Unit	1 year
Sensor Cartridge	1 year standard, 2 years extended warranty
Pump maintenance/swap interval	2 years minimum expected life (12 month warranty)
Mounting	Wall mounted using pre-drilled holes on base.
Top cover/Base	Painted Aluminum alloy

For more information

www.sps.honeywell.com

**HONEYWELL SENSING &
SAFETY TECHNOLOGIES**

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**THE
FUTURE
IS
WHAT
WE
MAKE IT**

Honeywell