

# MIDAS

# GAS MONITORING

# SYSTEM

GAS DETECTOR SPECIFICATIONS	
Transmitter dimension	
Size (unit with Sensor)	5.91 (H) × 2.56 (W) × 6.02 (D) in (150 × 65 × 153 mm)
Weight (unit with Sensor)	1.76 lb (0.8 kg)
NF3 Pyrolyzer Dimension	
Size (unit with Sensor)	2.75 (H) × 2.48 (W) × 3.35 (D) in (70 × 63 × 85 mm)
Weight (unit with Sensor)	0.9 lb (0.41 kg)
High-Temperature PFC Pyrolyzer Dimension	
Size (unit with Sensor)	3.9 (H) × 4.0 (W) × 5.5 (D) in (100 × 101 × 140 mm)
Weight (unit with Sensor)	3 lb (1.36 kg)
OP3 Pyrolyzer Dimension	
Size (unit with Sensor)	5.2 (H) × 2.4 (W) × 3.9 (D) in (132 × 60 × 98 mm)
Weight (unit with Sensor)	2.65 lb (1.20 kg)
NP1 Pyrolyzer Dimension	
Size (unit with Sensor)	5.02 (H) × 2.56 (W) × 5.29 (D) in (128 × 65 × 134 mm)
Weight (unit with Sensor)	1.8 lb (0.81 kg)
Power Requirements	
Operating Voltage	24VDC, -15 to +10%
Operating Voltage with Power over Ethernet (PoE)	48 VDC via PoE
Power Consumption	
Transmitter Unit	<5 W
With Pyrolyzer (Option)	<12.95 W
With Lonworks®	<8 W
With Lonworks® and Pyrolyzer	<15.95 W
Outputs	
Visual	Alarm, Power and Fault LEDs, LCD display with all gas readings and events
Relays	3 relays for Alarm1, Alarm 2 and Fault rated 30VDC, 1 A or 125VAC, 0.5 A; configurable NO or NC, latched or unlatched
Analog	3 wire sink, 3 wire source or 4 wire fully isolated, 0 to 21mA
Digital Communications	Modbus®, TCP Ethernet, Power over Ethernet (PoE), Lonworks®
Service Port	RS232C, PPP protocol



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Certification and Specification	
	CE marked Meets EN 50270:2006 (Type2) and EN 61000-6-4:2007 ETL approved UL 61010-1 Ed:3 IEEE 802.3af-2003
Performance	
	Refer to Individual Cartridge Datasheets
Transport System	
Flow Rate	500 mL/min
Transport Time	2 to 30 seconds maximum
Sample Line Tubing	0.125 in ID x 0.25 in OD
Tubing Length	Up to 100 ft (30 m) with FEP tubing
Exhaust Line Tubing	0.25 in ID x 0.375 in OD
Exhaust Length	Up to 100 ft (30m)
Ambient Point	In line air filter required
Operating Temperature	
Unit with Sensor	32° to 104°F (0° to 40°C)
Unit with Sensor and Pyrolyzer	32° to 86°F (0° to 30°C)
Wiring Requirement	
4-20mA	2 wire, 14 AWG maximum
Digital	CAT5 Cable or equivalent; RJ45 connector
Gas Concentration Display and Interface	
Instrument	4-digit alphanumeric display with separate units, flow rate bar graph and other icon driven indicators. 4 button interface keypad
Remote	Option for PC / PDA Internet browser access via Ethernet
Warranty	
Transmitter Unit	1 year
Sensor cartridge	1 year standard, 2 years extended warranty
Expected Pyrolyzer Life	MIDAS-T-OOP: 1 year MIDAS-T-NP1: 2 years
Installation Details	
Mounting	Wall mounted using pre-drilled holes on chassis. Options for DIN rail or vertical bracket mounting.
Remote	Cover: Painted steel Chassis/Mounting Bracket: Zinc plated steel

## 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

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TRANSMITTER DIMENSION			
GAS NAME	CHEMICAL FORMULA	RANGE	SENSOR PART NUMBER
Ammonia	NH <sub>3</sub>	0-100 ppm	MIDAS-E-NH3
Arsine	AsH <sub>3</sub>	0-200 ppb	MIDAS-E-ASH
Boron Trichloride	BCl <sub>3</sub>	0-8 ppm	MIDAS-E-HCL
Boron Trifluoride	BF <sub>3</sub>	0-8 ppm	MIDAS-E-HFX
Boron Trifluoride (Low Level)	BF <sub>3</sub>	0-2 ppm	MIDAS-E-HFL
Bromine	Br <sub>2</sub>	0-0.4 ppm	MIDAS-E-BR2
Butane	n-C <sub>4</sub> H <sub>10</sub>	0~100 %LEL	MIDAS-E-LEB
Carbon Dioxide	CO <sub>2</sub>	0-2.0%	MIDAS-E-CO2
Carbon Monoxide	CO	0-100 ppm	MIDAS-E-COX
Carbon Monoxide (Low H <sub>2</sub> interference)	CO	0-100 ppm	MIDAS-E-COH
Chlorine	Cl <sub>2</sub>	0-2 ppm	MIDAS-E-HAL
Chlorine Dioxide	ClO <sub>2</sub>	0-0.4 ppm	MIDAS-E-BR2
Diborane	B <sub>2</sub> H <sub>6</sub>	0-400 ppb	MIDAS-E-B2H
Dichlorosilane	H <sub>2</sub> Cl <sub>2</sub> Si	0-8 ppm	MIDAS-E-HCL
Difluoromethane**	CH <sub>2</sub> F <sub>2</sub>	0-240 ppm	MIDAS-E-XCF
Disilane	Si <sub>2</sub> H <sub>6</sub>	0-20 ppm	MIDAS-E-SHX
Ethylene	C <sub>2</sub> H <sub>4</sub>	0~100 %LEL	MIDAS-E-LEL
Fluorine	F <sub>2</sub>	0-4 ppm	MIDAS-E-HAL
Germane	GeH <sub>4</sub>	0-800 ppb	MIDAS-E-ASH
Hexafluorobutadiene**	C <sub>4</sub> F <sub>6</sub>	0-40 ppm	MIDAS-E-CFX
Hydrogen (%LEL)	H <sub>2</sub>	0~100 %LEL	MIDAS-E-LEL*
Hydrogen (ppm)	H <sub>2</sub>	0-1000 ppm	MIDAS-E-H2X
Hydrogen Bromide	HBr	0-8 ppm	MIDAS-E-HCL
Hydrogen Chloride	HCl	0-8 ppm	MIDAS-E-HCL
Hydrogen Cyanide	HCN	0-20 ppm	MIDAS-E-HCN
Hydrogen Fluoride	HF	0-12 ppm	MIDAS-E-HFX
Hydrogen Fluoride (Low Level)	HFL	0-2 ppm	MIDAS-E-HFL
Hydrogen Sulfide	H <sub>2</sub> S	0-40 ppm	MIDAS-E-H2S
Methane (%LEL)	CH <sub>4</sub>	0~100 %LEL	MIDAS-E-LEL*
Methyl Fluoride**	CH <sub>3</sub> F	0-120 ppm	MIDAS-E-XHF
Nitric Oxide	NO	0-100 ppm	MIDAS-E-NOX
Nitrogen Dioxide	NO <sub>2</sub>	0-12 ppm	MIDAS-E-NO2
Nitrogen Trifluoride**	NF <sub>3</sub>	0-40 ppm	MIDAS-E-HFX for OOP, XHF for NP1
Octane	n-C <sub>8</sub> H <sub>18</sub>	0~100 %LEL	MIDAS-E-LEO
Octofluorocyclopentene**	C <sub>5</sub> F <sub>8</sub>	0-40 ppm	MIDAS-E-XCF
Oxygen	O <sub>2</sub>	0~25% v/v	MIDAS-E-O2X
Ozone	O <sub>3</sub>	0-0.7 ppm	MIDAS-E-O3H
Ozone (Low Level)	O <sub>3</sub>	0-0.4 ppm	MIDAS-E-O3X
Phosphine	PH <sub>3</sub>	0-1200 ppb	MIDAS-E-PH3
Propane	C <sub>3</sub> H <sub>8</sub>	0~100 %LEL	MIDAS-E-LEX
Propylene	C <sub>3</sub> H <sub>6</sub>	0~100 %LEL	MIDAS-E-LEL
R134a	C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>	0-1000 ppm	MIDAS-E-XCF
Silane	SiH <sub>4</sub>	0-20 ppm	MIDAS-E-SHX
Silane (Low Level)	SiH <sub>4</sub>	0-2 ppm	MIDAS-E-SHL
Sulfur Dioxide	SO <sub>2</sub>	0-8 ppm	MIDAS-E-SO2
Tetra Ethyl Ortho Silicate	TEOS	0-40 ppm	MIDAS-E-TEO
Tungsten Hexafluoride	WF <sub>6</sub>	0-12 ppm	MIDAS-E-HFX
Tungsten Hexafluoride (Low Level)	WF <sub>6</sub>	0-2 ppm	MIDAS-E-HFL

\*MIDAS-E-LEL Cartridge carries a 2-year warranty but can be calibrated up to 5 years \*\* Gases require Midas Pyrolyzer

Midas detectors are not ETL approved for monitoring in or sampling from classified areas above 25% LEL

**For more information**

[automation.honeywell.com](https://automation.honeywell.com)

**Honeywell Process  
Measurement and Control**

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