# Honeywell

# **Midas**<sup>®</sup> GAS DETECTOR SPECIFICATIONS

### **Gas Monitoring System**

Transmitter Dimension				
Size (unit with Sensor)	5.91 (H) x 2.56 (W) x 6.02 (D) in (150 x 65 x 153 mm)			
Weight (unit with Sensor)	1.76 lb (0.8 kg)			
NF <sub>3</sub> Pyrolyzer Dimension				
Size (unit with Sensor)	2.75 (H) x 2.48 (W) x 3.35 (D) in (70 x 63 x 85 mm)			
Weight (unit with Sensor)	0.9 lb (0.41 kg)			
High-Temperature PFC Pyrolyzer Dimension				
Size (unit with Sensor)	3.9 (H) x 4.0 (W) x 5.5 (D) in (100 x 101 x 140 mm)			
Weight (unit with Sensor)	3 lb (1.36 kg)			
OP3 Pyrolyzer Dimension				
Size (unit with Sensor)	5.2 (H) x 2.4 (W) x 3.9 (D) in (132 x 60 x 98 mm)			
Weight (unit with Sensor)	2.65 lb (1.20 kg)			
NP1 Pyrolyzer Dimension				
Size (unit with Sensor)	5.02 (H) x 2.56 (W) x 5.29 (D) in (128 x 65 x 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 <sup>®</sup> , TCP Ethernet, Power over Ethernet (PoE), Lonworks <sup>®</sup>			
Service Port	RS232C, PPP protocol			



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-00P: 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.

Midas Cartridge Detectable Gases				
Gas Name	Chemical Formula	Range	Sensor Part Number	
Ammonia	NH <sub>3</sub>	9-100 ppm	MIDAS-E-NH3	
Arsine	$AsH_3$	18-200 ppb	MIDAS-E-ASH	
Boron Trichloride	BCI <sub>3</sub>	0.72-8 ppm	MIDAS-E-HCL	
Boron Trifluoride	$BF_3$	0.72-8 ppm	MIDAS-E-HFX	
Boron Trifluoride (Low Level)	$BF_3$	0.18-2 ppm	MIDAS-E-HFL	
Bromine	Br <sub>2</sub>	0.036-0.4 ppm	MIDAS-E-BR2	
Carbon Dioxide	CO <sub>2</sub>	0.15-2.0%	MIDAS-E-CO2	
Carbon Monoxide	CO	9-100 ppm	MIDAS-E-COX	
Chlorine	Cl <sub>2</sub>	0.18-2 ppm	MIDAS-E-HAL	
Chlorine Dioxide	CIO <sub>2</sub>	0.036-0.4 ppm	MIDAS-E-BR2	
Diborane	$B_2H_6$	36-400 ppb	MIDAS-E-B2H	
Dichlorosilane	$H_2CI_2Si$	0.72-8 ppm	MIDAS-E-HCL	
Difluoromethane**	CH <sub>2</sub> F <sub>2</sub>	16-240 ppm	MIDAS-E-XCF	
Disilane	Si <sub>2</sub> H <sub>6</sub>	1.8-20 ppm	MIDAS-E-SHX	
Fluorine	F <sub>2</sub>	0.36-4 ppm	MIDAS-E-HAL	
Germane	GeH <sub>4</sub>	70-800 ppb	MIDAS-E-ASH	
Hexafluorobutadiene**	$C_4F_6$	3-40 ppm	MIDAS-E-CFX	
Hydrogen (%LEL)	H <sub>2</sub>	6.5-100% LEL	MIDAS-E-LEL*	
Hydrogen (ppm)	H <sub>2</sub>	90-1000 ppm	MIDAS-E-H2X	
Hydrogen Bromide	HBr	0.72-8 ppm	MIDAS-E-HCL	
Hydrogen Chloride	HCI	0.72-8 ppm	MIDAS-E-HCL	
Hydrogen Cyanide	HCN	1.8-20 ppm	MIDAS-E-HCN	
Hydrogen Fluoride	HF	1.05-12 ppm	MIDAS-E-HFX	
Hydrogen Fluoride (Low Level)	HFL	0.18-2 ppm	MIDAS-E-HFL	
Hydrogen Sulfide	H₂S	3.6-40 ppm	MIDAS-E-H2S	
Methane (%LEL)	CH <sub>4</sub>	6.5-100% LEL	MIDAS-E-LEL*	
Methyl Fluoride**	CH₃F	8-120 ppm	MIDAS-E-XHF	
Nitric Oxide	NO	9-100 ppm	MIDAS-E-NOX	
Nitrogen Dioxide	NO <sub>2</sub>	1.05-12 ppm	MIDAS-E-NO2	
Nitrogen Trifluoride**	NF <sub>3</sub>	3.6-40 ppm	MIDAS-E-HFX for 00P, XHF for NP1	
Octofluorocyclopentene**	C <sub>5</sub> F <sub>8</sub>	3-40 ppm	MIDAS-E-XCF	
Oxygen	O <sub>2</sub>	0.2-25% v/v	MIDAS-E-O2X	
Ozone	O <sub>3</sub>	0.065-0.7 ppm	MIDAS-E-O3H	
Ozone (Low Level)	O <sub>3</sub>	0.036-0.4 ppm	MIDAS-E-O3X	
Phosphine	PH3	110-1200 ppb	MIDAS-E-PH3	
Silane	SiH <sub>4</sub>	1.8-20 ppm	MIDAS-E-SHX	
Silane (Low Level)	SiH <sub>4</sub>	0.18-2 ppm	MIDAS-E-SHL	
Sulfur Dioxide	SO <sub>2</sub>	0.7-8 ppm	MIDAS-E-SO2	
Tetra Ethyl Ortho Silicate	TEOS	3.6-40 ppm	MIDAS-E-TEO	
Tungsten Hexafluoride	WF <sub>6</sub>	1.05-12 ppm	MIDAS-E-HFX	
Tungsten Hexafluoride (Low Level)	WF <sub>6</sub>	0.18-2 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

**Find out more** www.honeywellanalytics.com Toll-free: 800.538.0363

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