

## MIDAS<sup>®</sup> SPECIFICATIONS

### Gas Monitoring System



Transmitter Dimension	
Size (unit with Sensor)	120mm (H) x 63mm (W) x 150mm (D)
Weight (unit with Sensor)	0.8kg
Power Requirements	
Operating Voltage	24V DC Nominal +/- 10%
Operating Voltage with Power over Ethernet (PoE)	36 - 57 VDC via PoE, 48V DC Nominal
Power Consumption	
Transmitter Unit	~ 5.0 W
With Pyrolyzer (Option)	< 12.95 W
Outputs	
Visual	Alarm, Power and Fault lights as well as back lit LCD display with all gas readings and events
Relays	3 relays for Alarm1, Alarm 2 and Fault rated 1.0A @ 30VDC or 0.5A @125VAC; configurable NO or NC, latched or unlatched
Analog	2 wire isolated, 0 - 22mA, Sink or Source
Digital Communications	Modbus / TCP Ethernet / Power over Ethernet (PoE)
Service Port	RS232C / PPP protocol
Certification & Specification	
	CE marked Meets EN 50270:1999 (Type2) and EN 55011:2000 ETL approved UL 61010B and CSA-C22.2 No. 1010.1-92 IEEE 802.3af-2003
Performance	
	(see cartridge specification sheets)
Sampling	
Flow Rate	500 mL/min
Transport Time	2 - 30 seconds maximum
Tubing Length	Up to 30m (100 feet) with FEP tubing dependant on gas
Ambient Point Monitoring	In line air filter recommended
Exhaust Length	Up to 30m (100 feet)
Tubing Requirement	
Sample	6.35mm (1/4") OD x 3.18mm (1/8"), FEP, 30m (100 feet) maximum dependant on gas type
Exhaust	6.35mm (1/4") OD x 4.76mm (3/16"), FEP, 30m (100 feet)

Operating Temperature	
Unit with Sensor	0°C (32°F) to 40°C (104°F)
Operating Humidity	
Unit with Sensor	0-90% rH non-condensing (see cartridge specification sheets for cartridge operating conditions)
Wiring Requirement	
4-20mA/DC Power/Relays	14 AWG Maximum
Digital/POE	CAT 5 cable or equivalent, RJ45 connector
Gas Concentration Display & Interface	
Instrument	4-digit alphanumeric display with separate measurement units, flow rate bar graph and other icon driven indicators. 4 button keypad
Remote Interface	Internet Browser access via Ethernet or other Bus system
Warranty	
Transmitter Unit	1 year
Sensor Cartridge	1 year standard; 2 year with extended warranty program
Expected Lifetime of Pump	> 2 years
Installation Details	
Mounting	Wall mounted using 2 pre-drilled holes on rear chassis
Material	Steel case with paint finish

Optional MIDAS Pyrolyzer	
Size	174mm (H) x 73mm (W) x 117mm (D)
Weight	1.22kg
Warranty	Pyrolyzer: 2 yrs.; Heater Replacement: 2 yrs.

Ordering Information	
UNIT	PART NUMBER
Transmitter	MIDAS-T-001
Pyrolyzer	MIDAS-T-0P3

**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 <sub>3</sub>	18-200 ppb	MIDAS-E-ASH
Boron Trichloride	BCl <sub>3</sub>	0.72-8 ppm	MIDAS-E-HCL
Boron Trifluoride	BF <sub>3</sub>	0.72-8 ppm	MIDAS-E-HFX
Boron Trifluoride (Low Level)	BF <sub>3</sub>	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	ClO <sub>2</sub>	0.036-0.4 ppm	MIDAS-E-BR2
Diborane	B <sub>2</sub> H <sub>6</sub>	36-400 ppb	MIDAS-E-B2H
Dichlorosilane	H <sub>2</sub> Cl <sub>2</sub> Si	0.72-8 ppm	MIDAS-E-HCL
Difluoromethane**	CH <sub>2</sub> F <sub>2</sub>	16-240 ppm	MIDAS-E-CFX
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 <sub>4</sub> F <sub>6</sub>	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	HCl	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	H <sub>2</sub> S	3.6-40 ppm	MIDAS-E-H2S
Methane (%LEL)	CH <sub>4</sub>	6.5-100% LEL	MIDAS-E-LEL*
Methyl Fluoride**	CH <sub>3</sub> F	8-120 ppm	MIDAS-E-CFX
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
Octafluorocyclopentene**	C <sub>5</sub> F <sub>8</sub>	3-40 ppm	MIDAS-E-CFX
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	PH <sub>3</sub>	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
Sulfur Hexafluoride**	SF <sub>6</sub>	700-8000 ppm	MIDAS-E-CFX
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**

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