

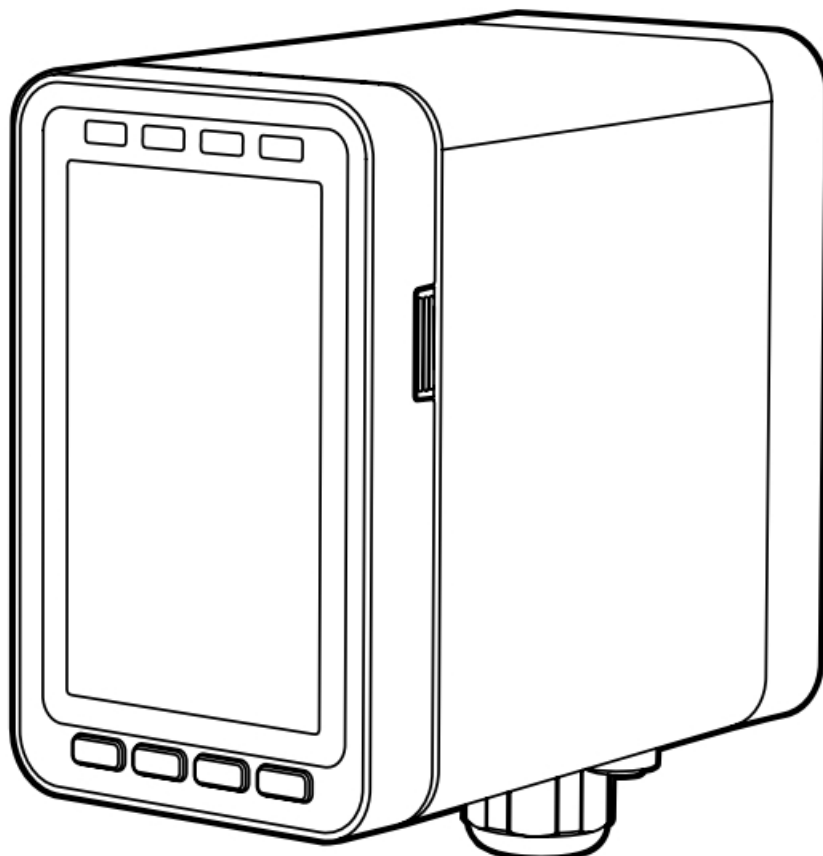


## Honeywell MIDAS-M Multi Gas Transmitter User Guide

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# Honeywell

### QUICK REFERENCE GUIDE



MIDAS-M MULTI GAS TRANSMITTER

# Fixed Single Point Extractive Multi-Gas Transmitter

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## Introduction

The Midas-M® is a Fixed Extractive Single Point with 4-in 1 Multi-Gas Detector that draws a sample locally or from a remote point to a sensor cartridge that is located inside the detector's chassis. A wide range of toxic, flammable, and oxygen gas sensor cartridges are available that enable the detection of gases used or generated in the Semiconductor and other manufacturing industries.

**NOTE:** Midas-M is shipped from the factory with the security function disabled. We strongly recommend enabling this function for the safe use of the detector. To enable it, select Set up > Security and type an 8 character password.

**NOTE:** Instrument grounding is required to ensure stable performance and to limit the effects of radiofrequency interference before installation.

## Safety



### CAUTION

Failure to observe the following precautions can cause injury to persons or damage to property:

- To minimize the risk of electrostatic charging, provide a suitable ground connection, and install the equipment in such a way that no accidental discharges occur.
- When Midas-M reaches the end of its life, it should be disposed of by local regulations.
- Do not use cleaning solvents or abrasives to clean the gas detector.
- Do not attempt to modify the product in any way from the manufacturer's design or specification. Warranty will be void and malfunction of the gas detector may result.
- Use only genuine spare parts and accessories with Midas-M. Malfunction may result if non-standard parts are used.
- • Midas-M is suitable for ordinary locations only and must not be installed in hazardous locations.
- Installation must be by the recognized standards of the appropriate authority in the country concerned. For Europe, see EN60079-14, EN60079-29-2, and EN61241-14. For installations in North America, the National Electrical Code (NFPA 70) should be strictly observed. All the appropriate local and national regulations should be observed.

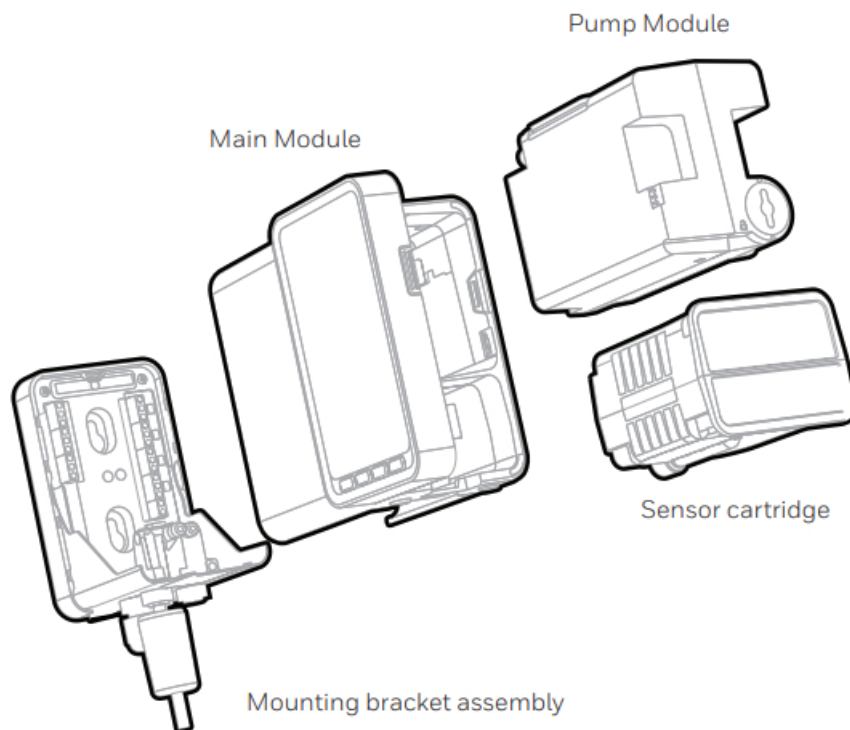
## Approvals

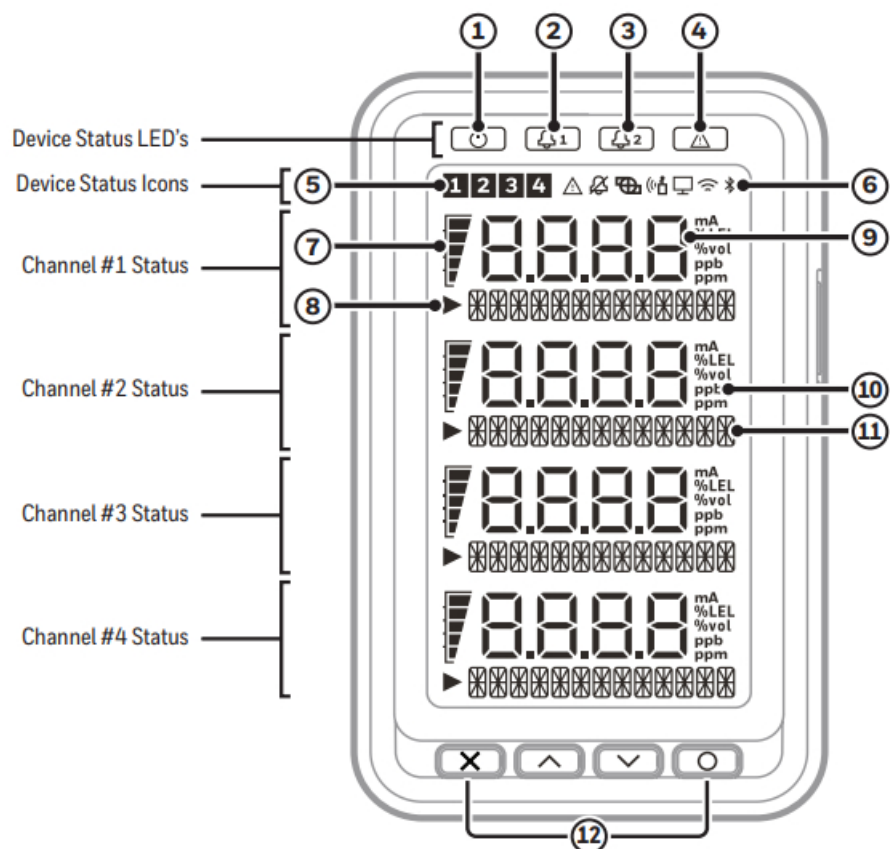
- Electrical UL/CSA/IEC/EN 610101
- EMC EN 50270
- ROHS

## What's in the Box







- 1 Transmitter device
- 2 Tubes (Large box only)
- 1 Quick Reference Guide

## Overview



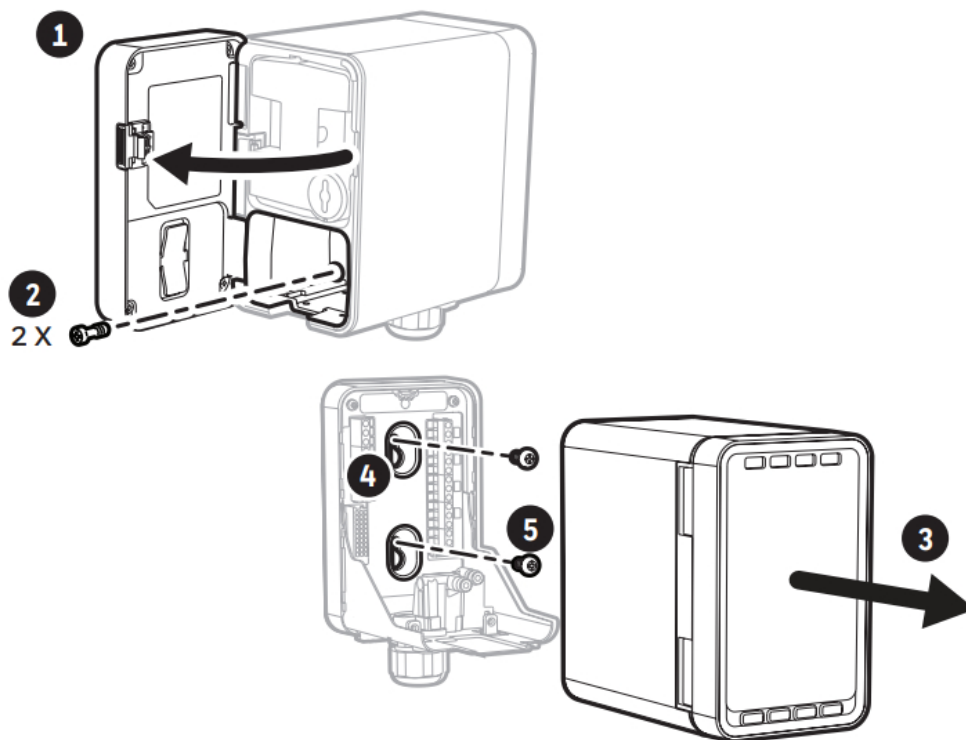


1. Power LED	7. Bar graph for gas concentration display
2. Alarm 1 LED	8. Entry indicator for menu operation
3. Alarm 2 LED	9. Gas concentration
4. Fault LED	10. Unit
5. Selected channel number indicator for menu operation	11. Gas name, menu, fault message
6. Device status icons	12. Buttons

	Wireless Connected	Fault	
	Bluetooth Connected	Inhibit	
	Internal pump running	Bump test in progress	

	Cancel
	Accept
	Up
	Down

## Mounting the Transmitter Device

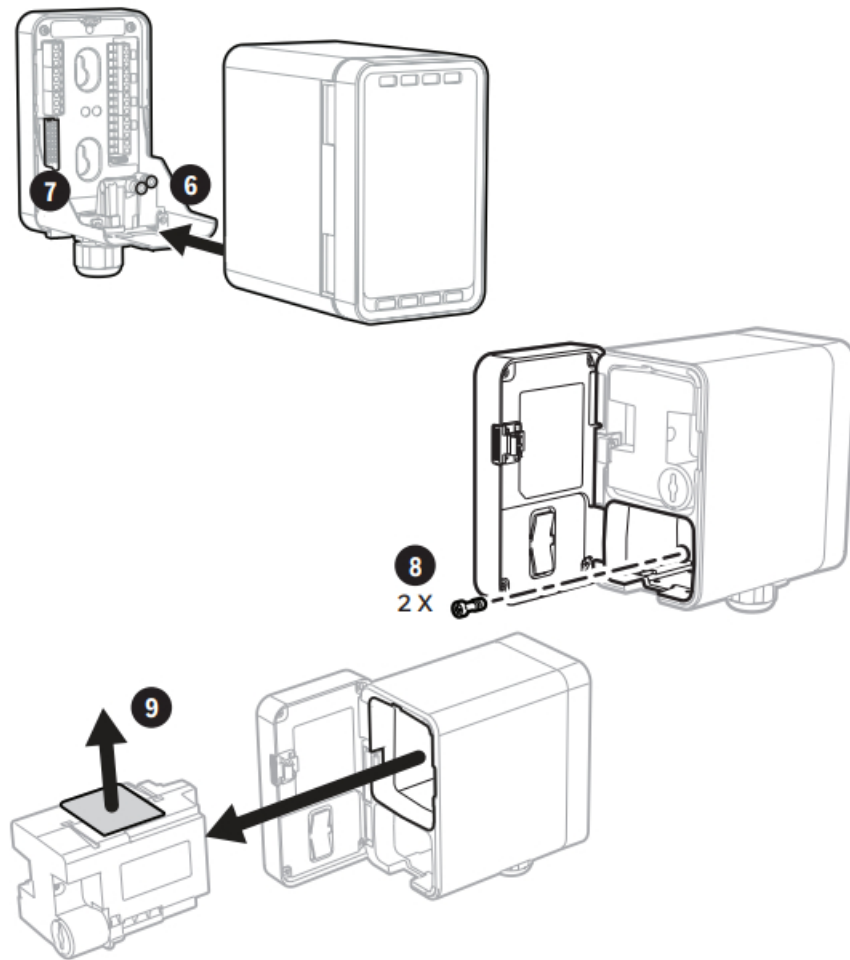


1. Open the door
2. Remove two screws
3. Carefully pull main chassis forward
4. Drill two holes 2.2 in
5. • Partially screw the fixings into the mounting surface.
  - Place the mounting bracket assembly over the screws, so they pass through the mounting holes and then slide down to locate in the slots.
  - Tighten the screws to secure the mounting bracket assembly.
6. • Align the rounded corner at the lower of the main module with the similar rounded corner at the bottom of the mounting bracket assembly
  - Slide the main module backward while pushing the main module up after connecting with a mounting bracket so that the PCB and connector and tubes engage simultaneously.
7. Ensure the PCB, connector, and tubes are fully engaged by firmly pushing the main chassis horizontally backward on the mounting bracket assembly. DO NOT PUSH ON THE LCD AS THIS MAY DAMAGE IT.
8. • Align the two fixing screws located at the bottom of the chassis with the screw threads on the mounting

bracket assembly.

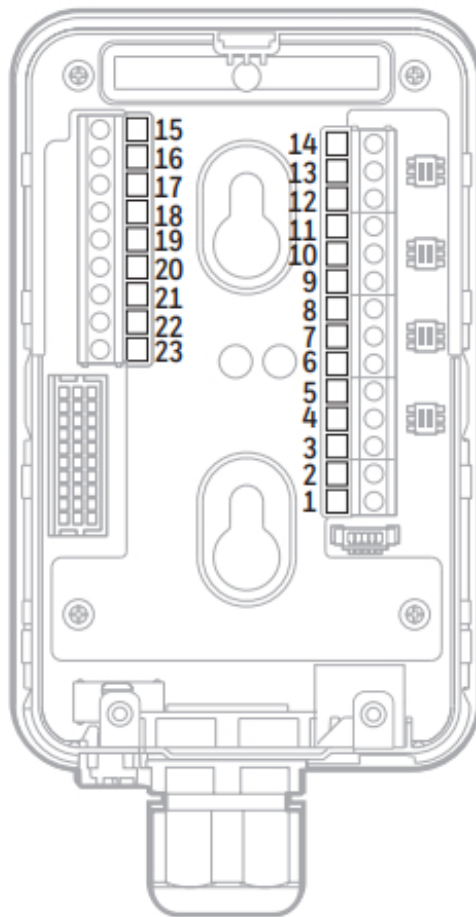
- Tighten the screws to secure the chassis to the mounting bracket assembly.

9. Remove the internal packing card securing the pump. Failure to remove this packing will result in damage to the Midas-M detector.



## Transmitter Terminals

<b>Terminal Number</b>	<b>Function</b>	<b>Description</b>
1	24Vdc Input	0Vdc
2	24Vdc Input	+24Vdc
3	mA output – Channel 1	COM
4	mA output – Channel 1	mA-
5	mA output – Channel 1	mA+
6	mA output – Channel 2	COM
7	mA output – Channel 2	mA-
8	mA output – Channel 2	mA+
9	mA output – Channel 3	COM
10	mA output – Channel 3	mA-
11	mA output – Channel 3	mA+
12	mA output – Channel 4	COM
13	mA output – Channel 4	mA-
14	mA output – Channel 4	mA+
15	Relay 1	Normally Closed
16	Relay 1	Common
17	Relay 1	Normally Open
18	Relay 2	Normally Closed
19	Relay 2	Common
20	Relay 2	Normally Open
21	Relay 3	Normally Closed
22	Relay 3	Common
23	Relay 3	Normally Open



## Commissioning

### WARNING

Before carrying out any work, ensure local and site procedures are followed. Ensure that the associated control panel is inhibited to prevent false alarms. The following procedure should be followed carefully and only performed by suitably trained personnel.

1. Ensure the detector is wired correctly.
2. Ensure that the correct sensor cartridge is fitted. (If the cartridge has not been stored at room temperature, allow one hour for equilibration.)
3. Ensure the on/off switch on the bottom of the mounting bracket assembly is in the on position.
4. Apply power to the system.
5. After the startup routine, the detector will display the normal operating mode.
6. Perform a leak test to ensure all connections are secure.
7. 'Waiting...' will be displayed on booting time.
8. Allow the detector to stabilize until the 'Warm-up' message is no longer displayed after booting. The maximum warm-up time is dependent on the sensor type. Refer to individual cartridge datasheets. Warm-up times are typically much faster.
9. Ensure the correct ID code is selected in Set-up -> alarm menu
10. If this is a first-time startup, the "Detect New Cartridge ~" message could be displayed. Press the 'O' button to clear the message.

## Specifications



<b>Operating Temperature:</b>	0°C~40°C
<b>Physical:</b>	
Size (unit with Sensor cartridge)	136 mm(H) x 83 mm(W) x 152 mm (D) (5.35 x 3.27 x 5.98 in)
Weight – Sensor cartridge	0.17 ~ 0.22 kg (0.38 ~ 0.49 lb) dependent on sensor type
<b>Optional Relay Dimensions:</b>	
Size	137 mm (H) X 84 mm (W) X 41 mm (D) (5.39 X 3.31 X 1.61 in)
Weight	0.31 kg (0.68 lb)
<b>Power Requirements:</b>	
Operating Voltage	24 VDC Nominal 15 to +10% (20.4 to 26.4 VDC)
Operating Voltage with Power over Ethernet (PoE)	48 VDC PoE (IEEE 802.3af compliant)
<b>Power Consumption:</b>	
Transmitter unit (normal condition) <sup>1</sup>	Typ. 5W

Transmitter unit (full load condition) <sup>2</sup>	< 11.45W
Transmitter with optional relay	< 12.9 W
<b>Outputs:</b>	
Visual	Alarm, power, fault LEDs, and LCD with all the gas readings and events. LEDs: Power(Green), Alarm 1 (Red), Alarm 2 (Red), Fault (Yellow)
Relays	Alarm1, Alarm2, Fault Relays (3) rated 1.0 A @ 30VDC or 1.0A @ 30Vdc or 0.5 A @ 125Vac 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. for each channel.
DigitalCommunications	Modbus / TCP Ethernet / Power over Ethernet (PoE)
<sup>1</sup> Normal condition: (1) No gas alarm (2) Without tube and pressure/vacuum <sup>2</sup> Full load condition: (1) 4-ch gas alarms are on (2) Maximum tubing length and pressure/vacuum on the inlet/exhaust line	

**Contact Us**

<p><b>Americas</b>  Honeywell Analytics 405 Barclay Boulevard  Lincolnshire, IL 60069  Tel: +1 847 955 8200  Toll free: +1 800 538 0363  Fax: +1 847 955 8208  <a href="mailto:detectgas@honeywell.com">detectgas@honeywell.com</a></p>	<p><b>Asia Pacific, India.</b>  Honeywell Analytics Asia Pacific, Co., Ltd.  7F Sangam IT Tower, 434 Worldcup Buk-ro, Mapo-gu, Seoul 03922, South Korea  Tel: +82 (0 2 6909 0300  Fax: +82 (0 2 2025 0388  India Tel: +91 124 4752 700  <a href="mailto:Analytics.ap@honeywell.com">Analytics.ap@honeywell.com</a></p>
<p><b>Europe, Middle East, and Africa</b>  Life Safety Distribution AG(LSD)  Javastrasse 2 8604 Hegna Switzerland  Tel: +41 (0)44 943 4300  Fax: +41 (0)44 943 4398  <a href="mailto:gasdetection@honeywell.com">gasdetection@honeywell.com</a></p>	<p><b>Mainland China</b>  Honeywell Industrial Safety Gas Detectors  Building#1, 555 Huanke Road Zhang Jiang  Hi-Tech Park Pudong New Area Shanghai  201203, China  Tel: 021-80386800  Fax: 021-60246070  <a href="mailto:gaschina@honeywell.com">gaschina@honeywell.com</a></p>
<p><b>Taiwan</b>  Honeywell Taiwan Ltd  6F-2, No.8, ZiQiang S. Road, Jubei City,  30264 Taiwan  Tel: +886-3-5169284  Fax: +886-3-5169339  <a href="mailto:analytics.tw@honeywell.com">analytics.tw@honeywell.com</a></p>	



Manuals and other information about this product are available at:

[www.honeywellanalytics.com/en/products/Midas-M](http://www.honeywellanalytics.com/en/products/Midas-M)

## Documents / Resources

	<p><a href="#">Honeywell MIDAS-M Multi Gas Transmitter</a> [pdf] User Guide  MIDAS-M, Multi Gas Transmitter, Honeywell</p>
	<p><a href="#">Honeywell Midas-M Multi Gas Transmitter</a> [pdf] User Guide  Midas-M, Multi Gas Transmitter, Gas Transmitter, Multi Transmitter, Transmitter, Midas-M</p>

## References

- [H Midas®-M multi gas detector | Honeywell](#)

Manuals+.