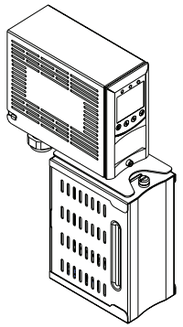
Quick Start Guide
MDA Scientific
Midas® Gas Detector
Pyrolyzer Module Option
(MIDAS-T-0P3)

Honeywell



Introduction

The MIDAS-T-0P3 pyrolyzer option is installed under the standard Midas gas detector. The air sample is drawn through the pyrolyzer to the sensor cartridge. The pyrolyzer converts the target gas present in the air sample into hydrogen fluoride (HF) by means of pyrolysis. The HF can then be measured by the sensor and the concentration displayed as the equivalent reading in ppm of the target gas.

To maintain sensor accuracy when using the pyrolyzer, do not allow the ambient temperature at the point of installation to exceed 30°C (86°F). Operation above this temperature may require more frequent bump testing or calibration to confirm working specification. Because of the higher operating temperatures when using the pyrolyzer module, Honeywell Analytics strongly recommends that the ventilated Midas Top Cover (part number MIDAS-A-039) be used in all pyrolyzer applications.

Note: The Pyrolyzer module is serviceable only by trained personnel or by Honeywell Analytics' Service Center. Inappropriate handling can cause injury and device damage.

Note: Le module pyrolyzer pouvant-être réparé. Par contre la réparation doit-être effectuée par un personnel qualifié ou à un centre de service autorisé d'Honeywell Analytics. Une manutention inadéquate pourrait causé des blessures ainsi que des dommages à l'appareil.

Gases that can be detected by the pyrolyzer are shown in this table.

Detectable Gases		
Cartridge Part No.	**Gas**	**Gas ID**
MIDAS-E-XHF, MIDAS-S-XHF	NF_3	01
	CH_3F	02
MIDAS-E-XCF, MIDAS-S-XCF	C_4F_6	01
	C_5F_8	02
	CH_2F_2	03

The unit's dimensions are shown in Figure 1.

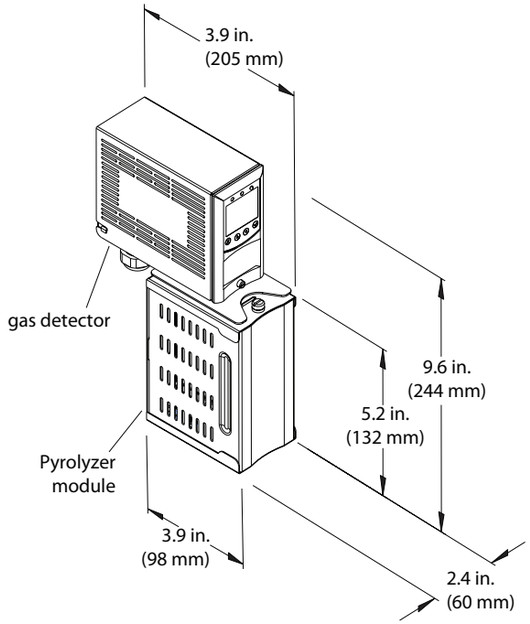


Figure 1: Dimensions

Fitting the Pyrolyzer Module

1. Disconnect power to the detector.
2. Unscrew the thumbscrew on the front panel.
3. Remove the cover by pulling it forward off the chassis (See Figure 2).

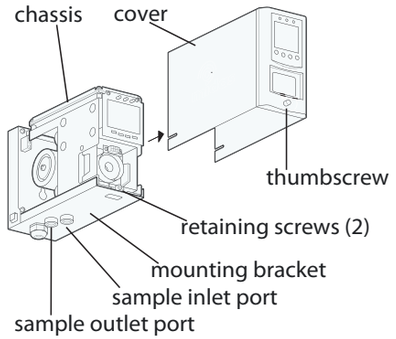


Figure 2: Removing the Midas cover

4. Unscrew the two retaining screws located at the bottom front of the chassis.
5. Pull the chassis forward to disconnect it from the mounting bracket assembly (see Figure 3).

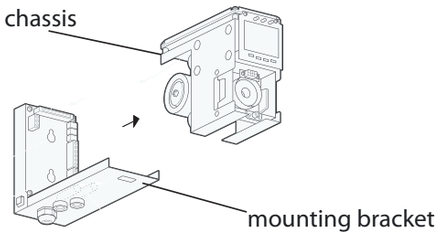


Figure 3: Removing the chassis

6. Thread the connector and wire harness from the pyrolyzer through the rectangular access in the bottom of the mounting bracket.
7. Secure the wires with a retention clip (if available).
8. Plug the connector into the socket (con5) at the bottom left of the terminal board.
9. Align the fitting at the top rear of the pyrolyzer with the sample inlet and outlet ports at the bottom of the mounting bracket.
10. Connect the pyrolyzer to the detector with the three provided mounting screws (see Figure 4).
11. The flow rate must be calibrated after installing or servicing the pyrolyzer. Refer to the Midas Technical Manual for the calibration procedure.

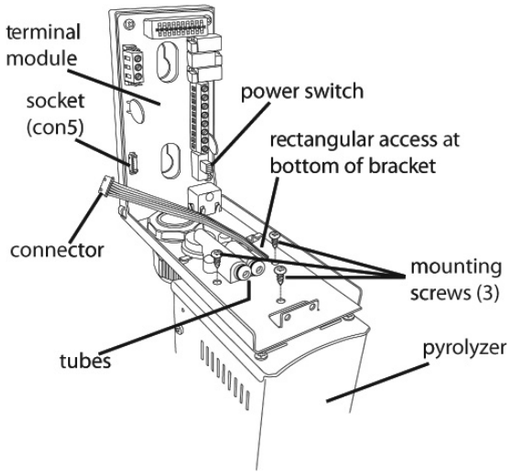


Figure 4: Attaching the pyrolyzer

Reassembling the Detector

1. Align:
   a. the PCB at the top rear of the chassis with the PCB connector at the top of the mounting bracket and
   b. the two tubes at the bottom rear of the chassis with the two tubes on the bottom of the mounting bracket.
2. Slide the chassis backward on the mounting bracket assembly so that the PCB, connector, and tubes engage fully. Push the chassis backward on the mounting bracket. **CAUTION: The LCD is fragile. Do not apply pressure to its surface.**
3. Tighten the retaining screws to secure the chassis to the mounting bracket.
4. Insert the sensor cartridge (see Figure 1) into the sensor cartridge chamber (Figure 5) and refer to the Sensor Cartridge Installation Quick Start Guide (MIDAS-A-021).

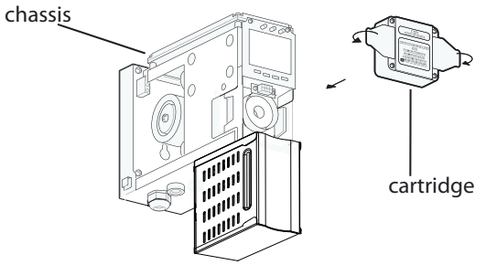


Figure 5: Reassembling the detector

5. Set the power switch to the “on” position.
6. Refit the ventilated top by aligning the slots on either side with the locating tabs on the mounting bracket assembly and pushing the cover horizontally until seated.

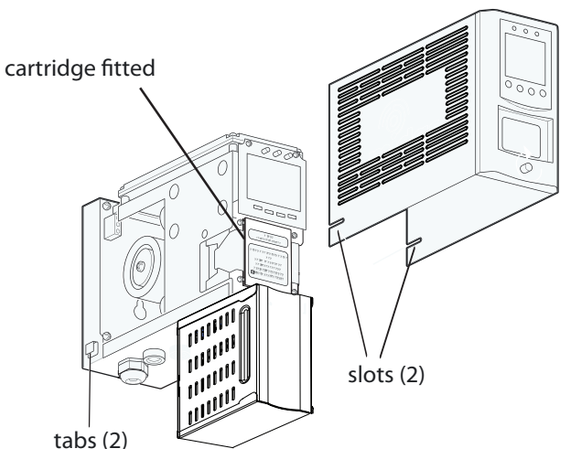


Figure 6: Refitting the top cover

7. Tighten the thumbscrew on the front panel.

Configuring the Detector

1. After completion of the startup sequence, press the “▲” button for a few seconds to select the setup menu.
2. Enter the passcode (if necessary).
3. Use the “▲” or “▼” buttons to select the setup menu “” icon. Press the “✓” to accept.
4. Use the “▲ or “▼ buttons to select the set alarms “ ALm” submenu. Press “✓” to accept.
5. The flashing gas ID code and the gas cylinder and alarms icon “” will appear.
6. Use the “▲” or “▼” buttons to change the gas ID number to that of the target gas . Press “✓ to accept.
7. Continue to accept or change the rest of the alarm settings. For further details on these settings, refer to the Midas Operating Instructions (part number MIDAS-A-001).
8. Press “✓” to update all changes (“UPdt” will be displayed).
9. Press “X” twice to return to normal operation.

Replacing the Pyrolyzer Heater Block

Warning: The Pyrolyzer module becomes extremely hot during operation. Allow it to cool before beginning this procedure.

Avertissement: Le module pyrolyzer devient extrêmement chaud à l’usage. Veuillez alloué une période de refroidissement avant de débuter cette procédure.

1. Loosen the thumbscrew on the top of the unit as shown in Figure 7.

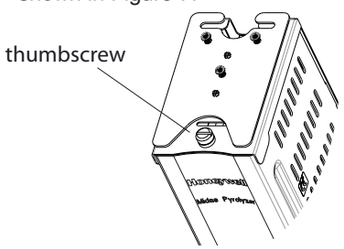


Figure 7: Loosening the thumbscrew

2. Slide the front cover out of the C-enclosure (see Figure 8).

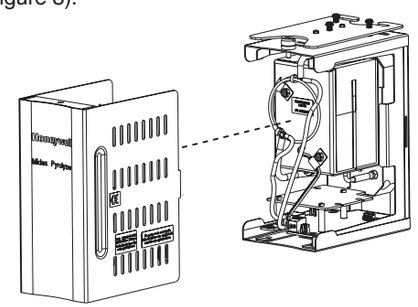


Figure 8: Removing the front cover

3. Disconnect the Viton tube from the upper micro tube port. Discard the Viton tube (Figure 9). Replacement Viton tubing is supplied with the new heater block.
4. Remove the P-clip and lock nut.
5. Disconnect the thermocouple and heater wires from their PCB connectors.
6. Remove the bolt from the manifold assembly.

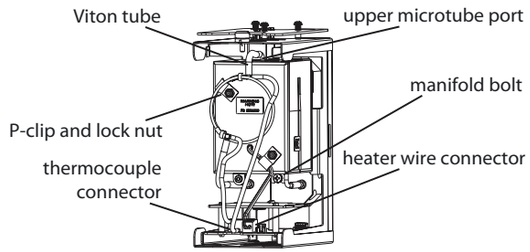


Figure 9: Disconnecting the heater block

7. Disconnect the lower Viton tube from the quartz tube port. (If necessary, swing the heater unit as shown in Figure 10.) Discard the old Viton tube.

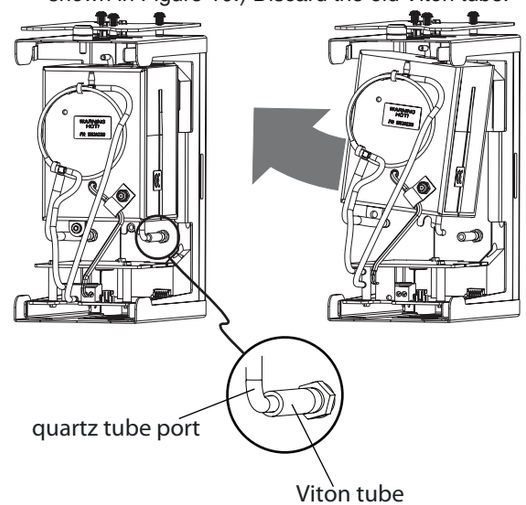


Figure 10: Disconnecting the lower Viton tube

8. Remove the heater block assembly by first lifting it up and then sliding it out of the keyhole connector in the C-enclosure (Figure 11).

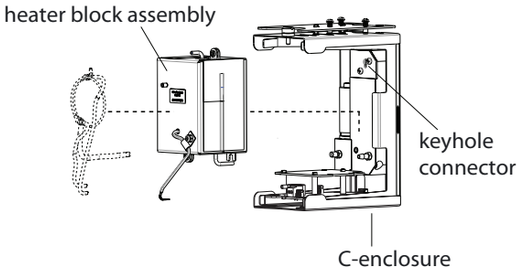


Figure 11: Removing the heater block assembly

9. Reverse steps 1 through 8 to install the new heater block assembly.

Note: The flow rate must be calibrated after installing or servicing the pyrolyzer. Refer to the Midas Technical Manual for the calibration procedure.

Honeywell

Part No. MIDAS-A-022
Revision 7, April 2013

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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