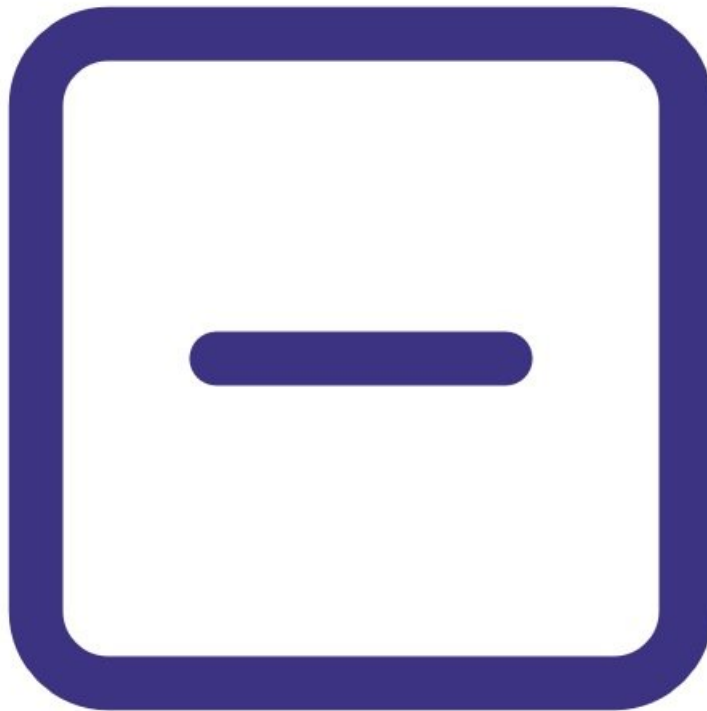




Remove gas module

Learn how to remove a gas module without replacing it.

Written By: Tanya Taylor



INTRODUCTION

You can easily do this procedure on site at the monitoring location.

To understand how often you should perform this service activity, [click here](#).



TOOLS:


- [Large Phillips head screwdriver](#) (1)



PARTS:

- [Luer cap](#) (1)
- [Flowmeter - TSI 4140](#) (1)

Step 1 — Enter service mode



Normal operation

Calibration

History

Manual Entry

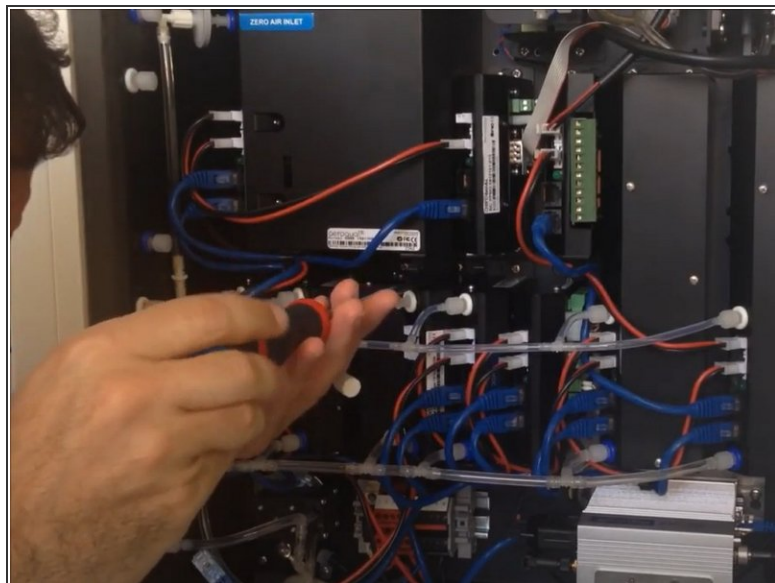
Manual service mode Start

	NO2 ppb	Ox ppb	O3 ppb	O3 raw ppb	PM2.5 raw µg/m ³	PM2.5 µg/m ³	TEMP °C	RH %
Gain	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Offset	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0
a	1.100		2.550					
b			1.870					

	NO2 ppb	Ox ppb	O3 ppb	O3 raw ppb	PM2.5 raw µg/m ³	PM2.5 µg/m ³	TEMP °C	RH %
Time								
11:42 a.m.	2.9	29.6	24.2	23.7	1.7	1.1	15.74	86.1
11:41 a.m.	2.8	29.2	24.0	23.5	1.6	1.0	15.63	86.1
11:40 a.m.	3.1	29.7	24.2	23.8	1.9	1.2	15.60	86.1
11:39 a.m.	3.6	30.2	24.1	23.7	1.5	1.0	15.55	87.1
11:38 a.m.	4.7	30.4	23.4	23.0	1.3	0.8	15.48	87.1

- [Enter service mode](#) so any fluctuations in the data caused from this activity can be excluded from air quality reports.

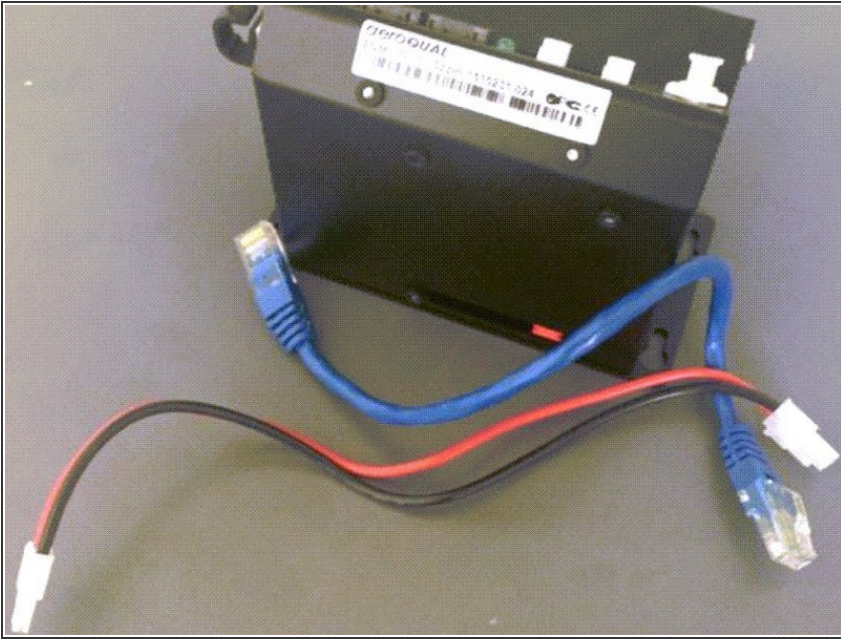
Step 2 — Remove the module



i Keep your monitor on. You don't need to turn it off for this procedure.

- Remove one blue communications cable and one red and black power cable.
 - Disconnect the sample inlet and exhaust tubes.
 - Loosen the retaining screws and carefully remove the module.
 - Reconnect the communication and power cables to ensure the remaining modules have power and communications.
- ⚠ Make sure the polarity of the red and black cable is the correct.**
- Insert luer caps into the sample inlet and exhaust connections.

Step 3



- After you've completed this task you should have one communication cable and one power cable left over.

Step 4 — Remove configuration

System	Sensors	Communications
Serial number AQY Demo-001 Name Sales & Support Demo Instrument type AQY1 Software version 1.16.7263 Time zone (UTC+12:00) Auckland Summer time adjusted <input checked="" type="checkbox"/> Location <input type="text"/> Default averaging period 1 hour	Aeroqual Sensor Port COM 1 Poll interval Every 5 seconds Poll time-out 1.5 seconds Active Sensors NO2 X Ox O3 O3 raw PM2.5 raw PM2.5 TEMP RH DP Add new sensor ...	Remote config interval Every minute Remote config server Demo Server VPN Server Demo Offline reboot interval 24 hours Ethernet mode Direct (DHCP server) Ethernet IP address 10.10.0.1 WiFi mode Client WiFi SSID PDEV Router

- Go to the **Configure** app and click **Settings** from the side menu.
- Remove the module from the **Active Sensors** list in the **Sensors** column by hovering over the sensor name and clicking the cross that displays.
- Click **Save** when the confirmation message appears.

Step 5 — Check inlet flow



- i When you remove a gas module, you reduce the overall flow rate of the main gas inlet.
- Read the PDF attached to the end of this user guide to understand the expected flow rate for the gas inlet.
- [Measure the inlet flow rate to make sure it's as expected.](#)

Step 6 — Record in journal

e ▾
Instrument ▾ Air Quality Monitor (AQM65 04082015-437) ▾

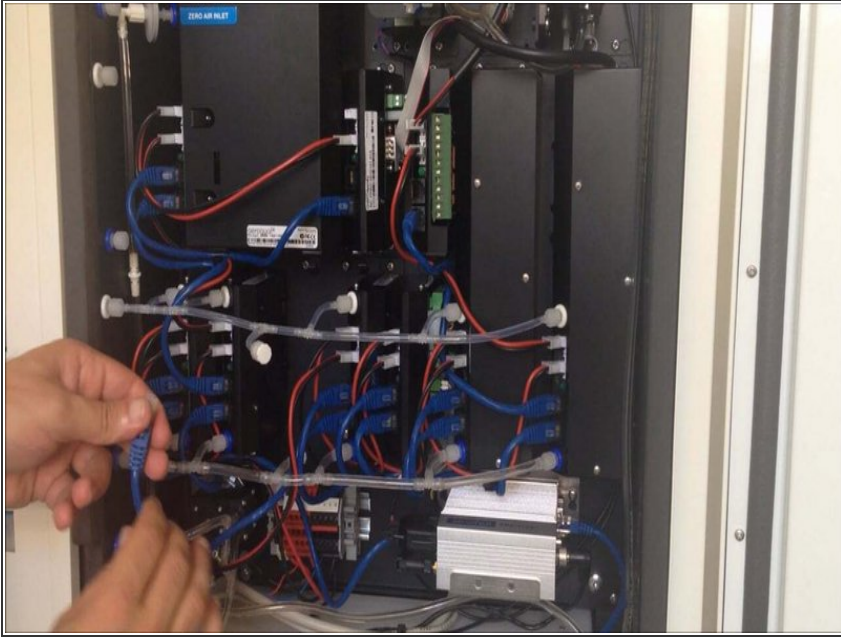
All journal types ▾

User entry | Cloud user - John Wagner

1. Site Inspection: No new local emission sources Instrument in good condition No obstructions to monitoring equipment	2. Instrument inspection: Cooling fan operational PM and gas inlet secure Instrument has been running at stable									
3. Equipment: Aeroqual Gas dilution calibrator: Aircal 1000 Aeroqual Ozone calibrator: AQM O3Cal Aeroqual Flow meter: AQM R7										
4. Flow rate check: Expected flow rate = 0.450 ml per min, Measured flow rate = 0.452 ml per min Main inlet flow rate OK, individual module flow rates were not measured.										
6. Zero calibration All modules passed zero calibration, all modules were stable and all offsets were within acceptable limits.										
7. Span Calibration <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">CO @ 10.00 ppm</td> <td style="width: 40%;">Module response was 8.95 ppm gain adjustment to 1.15</td> <td style="width: 30%;">pass</td> </tr> <tr> <td>SO2 @ 0.2 ppm</td> <td>Module response was 0.210 ppm gain adjustment to 0.92</td> <td>pass</td> </tr> <tr> <td>NO2 @ 0.2 ppm</td> <td>Module response was 0.090 ppm gain adjustment to 2.10</td> <td>pass (module may need replacing soon contact A</td> </tr> </table>		CO @ 10.00 ppm	Module response was 8.95 ppm gain adjustment to 1.15	pass	SO2 @ 0.2 ppm	Module response was 0.210 ppm gain adjustment to 0.92	pass	NO2 @ 0.2 ppm	Module response was 0.090 ppm gain adjustment to 2.10	pass (module may need replacing soon contact A
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8 Pack up. Next scheduled calibration 3 months from now. June 2017.										

- [Record the results of this service activity in the monitor's journal.](#)
- [Exit service mode.](#)

Step 7 — Video of steps



- To see the process of removing a module in an AQM 65, watch this video.

For further support, contact [Technical Support](#).