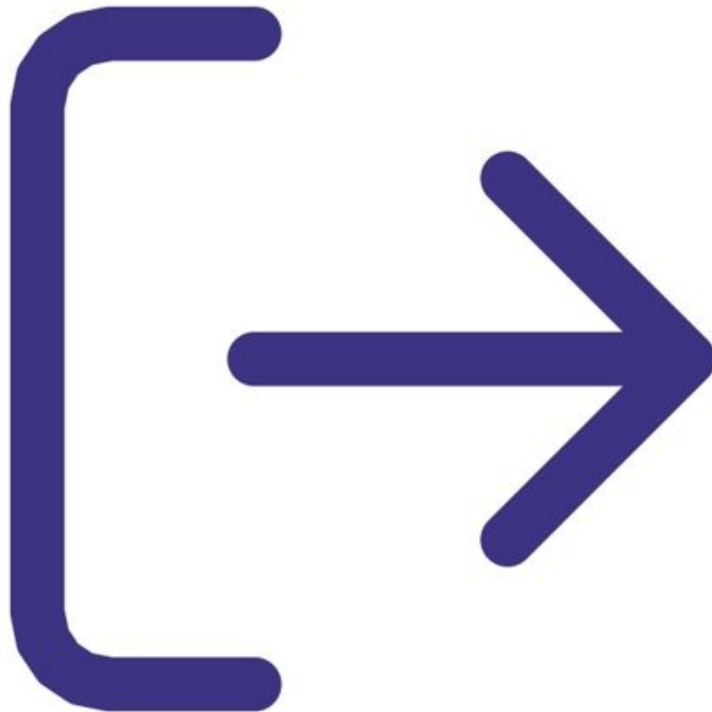




Wire for 4-20mA output

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INTRODUCTION

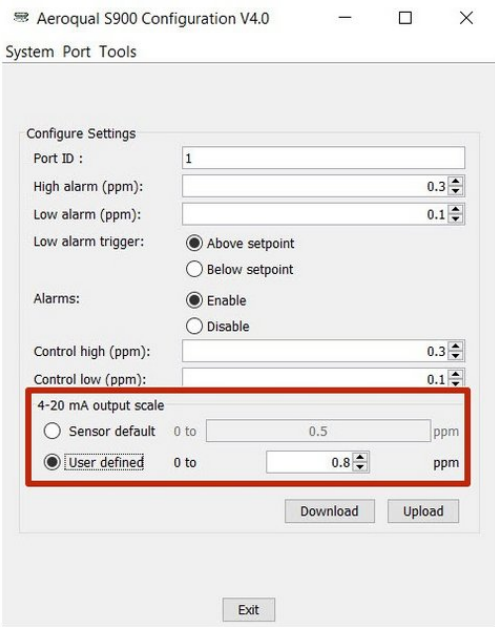
You can connect your S900 to a PLC or current sensing device via the 4-20mA output to provide gas concentration information.

The full scale (20mA) value is factory set but you can change the output scale in the fixed monitor configuration software.

If the sensor fails, the output will be 20mA. We recommended you use the DIAG output to alert a sensor fault condition.

The 4-20mA output loop is opto-isolated from the monitor and we recommend a separate power supply with a voltage in the range 12-24V applied with the correct polarity. This produces the most reliable connection method. If opto-isolation isn't important, the 4-20 mA loop can be powered by the same power supply as the unit.

Step 1 — Configure 4-20mA output scale



Aeroqual S900 Configuration V4.0

System Port Tools

Configure Settings

Port ID : 1

High alarm (ppm): 0.3

Low alarm (ppm): 0.1

Low alarm trigger: ☒ Above setpoint
☐ Below setpoint

Alarms: ☒ Enable
☐ Disable

Control high (ppm): 0.3

Control low (ppm): 0.1

4-20 mA output scale

☐ Sensor default 0 to 0.5 ppm

☒ User defined 0 to 0.8 ppm

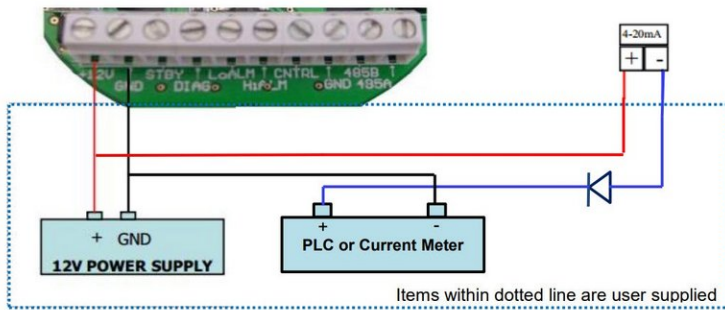
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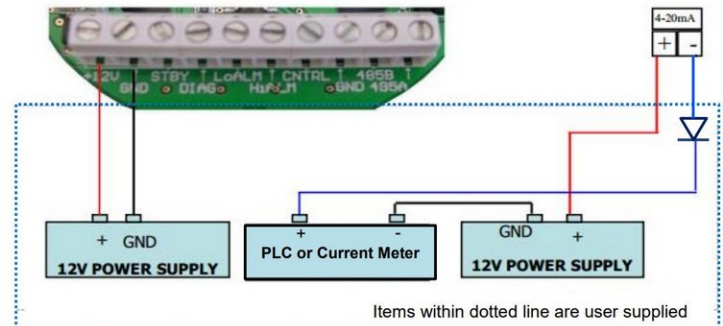
- Configure the 4-20mA output scale using Aeroqual's [fixed monitor configuration software](#).

Step 2 — Wire to PLC

4-20mA wiring diagram for Loop (without opto-isolation)



4-20mA wiring diagram for Loop (with opto-isolation)



- Connect the 4-20mA loop on the screw connector to the power supply and current measuring device (e.g. PLC), ensuring the polarity is correct.
 - ⓘ Note: If the polarity is incorrect, the 4-20mA output may be permanently damaged.
- Power on the monitor and PLC.
- Check the PLC or current sensing device to ensure data is being shown.
- These diagrams show 4-20mA wiring for loop with and without opto-isolation.

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