

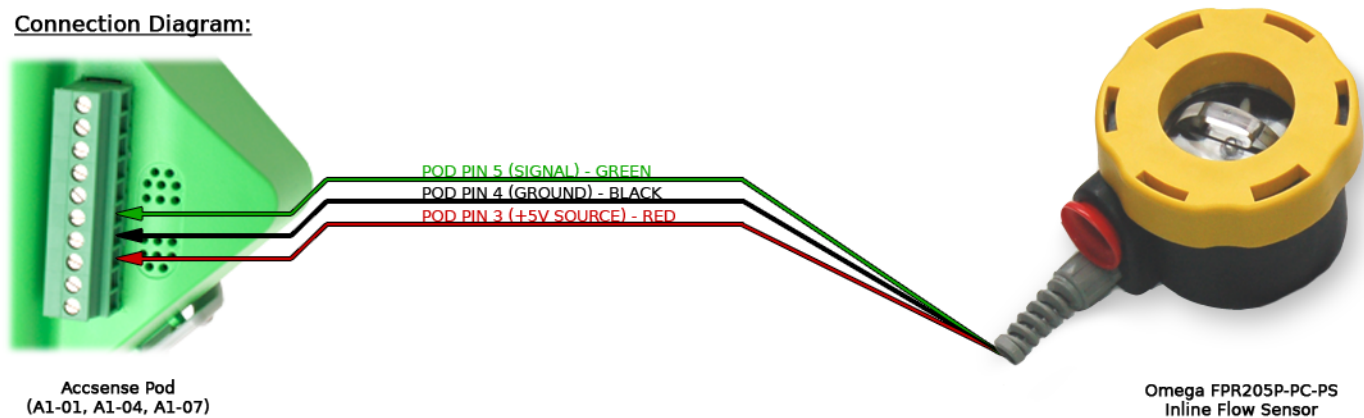
Overview:

The purpose of this document is to illustrate the proper connection and configuration of a flow-rate sensor, and specifically connecting the Omega FPR205P-PC-PS Inline Flow Rate sensor. These sensor works by connecting to the Totalizer in our Pods, and counting the number of revolutions. It can be connected to any pod with a Totalizer and +5V source.

Pod Choices: **A1-01** **A1-04** **A1-07**

Connects to Pod Input: **Totalizer, +5VDC**

Connection Diagram:



Coefficient Calculation:

This sensor utilizes the Event Counter to calculate flow rate. Because it is a linear transfer function, coefficients 3 and 4 are not used. The Pod's Totalizer is used to monitor the output pulses of this sensor. The displayed units are to be Gallons per Minute (GPM). Note your Measurement Interval, specified in the Gateway Preferences.

Coefficient Equation:

$$displayed_value = coeff_1 + coeff_2 \cdot [value] + coeff_3 \cdot [value]^2 + coeff_4 \cdot [value]^3$$

The sensitivity of this unit is 3.3333 Hz/GPM. For this example, the Measurement_Interval is 240 Seconds. If your measurement interval is different, you will need to recalculate coeff_2.

$$coeff_2 = \frac{1}{Sensitivity \cdot Measurement_Interval} = \frac{1}{3.333 \cdot 240} = 1.25 \times 10^{-3}$$

General	Info	Advanced
Calibration Coefficient-1: <input type="text" value="0"/>		
Calibration Coefficient-2: <input type="text" value="1.25E-3"/>		
Calibration Coefficient-3: <input type="text" value="0"/>		
Calibration Coefficient-4: <input type="text" value="0"/>		

Accsense Online - Sensor Preferences (Advanced)

Accsense, Inc provides these datasheets as a guide only, and makes no claims as to the validity or accuracy of these schematics, calculations, or uses. Always review and follow the documentation that comes with the specific sensors. If you have questions about how to hook up a particular sensor, please contact us via the telephone, or through the tech support contacts on our website.

At this point, we likely want some more legal mumbo-jumbo, in order to keep ourselves legally in the clear if someone tries to follow a datasheet and instead ends up frying their circuit.