

# Differential Gas Pressure Sensor 50 kPa



## Product Description

The 1138 Differential Pressure Sensor is a dual ported air pressure sensor that measures the pressure difference between the two ports. It can measure pressure from 0 kPa to 50 kPa.

## Comes Packaged with

- [3002 – 60cm Phidget Cable](#)

## Warning



This sensor is designed to measure the pressure of clean, non-condensing air. Contact with moist air (i.e, human breath), dusty air, or other gases can damage the sensor.

## Product Specifications

### Sensor Properties

|                       |                             |
|-----------------------|-----------------------------|
| Sensor Type           | Gas Pressure (Differential) |
| Sensor Output Type    | Ratiometric                 |
| Pressure Min          | 0 Pa                        |
| Pressure Max          | 50 kPa                      |
| Pressure Resolution   | 56 Pa                       |
| Measurement Error Max | $\pm 2.5 \%$                |
| Warm-up Time          | 20 ms                       |
| Response Time Max     | 1 ms                        |

## Electrical Properties

|                         |              |
|-------------------------|--------------|
| Supply Voltage Min      | 4.8 V DC     |
| Supply Voltage Max      | 5.3 V DC     |
| Current Consumption Max | 10 mA        |
| Output Impedance        | 1 k $\Omega$ |
| Output Voltage Min      | 250 mV DC    |
| Output Voltage Max      | 4.8 V DC     |

## Physical Properties

|                           |        |
|---------------------------|--------|
| Operating Temperature Min | -40 °C |
| Operating Temperature Max | 125 °C |
| Recommended Tubing Size   | 3 mm   |