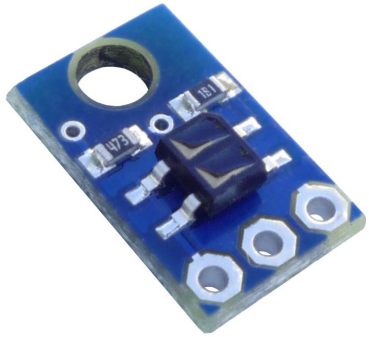
Name: **Analog Reflectance Sensor**
Code: **MR003-007.1**



This reflectance sensor carries an infrared LED and phototransistor pair. The phototransistor is connected to a pull-up resistor to form a voltage divider that produces an analog voltage output between 0V and +5V as a function of the reflected IR. Lower output voltage is an indication of greater reflection.

The LED current-limiting resistor is set to deliver approximately 20mA. The current requirement can be met by some microcontroller I/O lines, allowing the sensor to be powered up and down through an I/O line to conserve power.

Because of its small size, multiple units can easily be arranged to fit various applications such as line following robots and proximity/edge detection

CONNECTIONS

OUT	Analog output
GND	Ground
+5V	Supply power (+5V)

Tab.1 – Connections

SPECIFICATIONS

Supply voltage	+5V
Supply current	20mA
Operating temperature	-25 / +85°C
Optimal sensing distance	1/8” (3mm)
Interface	Analog
Dimensions	0.5” x 0.31” (12.7 x 7.9 mm)
Weight	0.01 oz (0.3 g)

Tab.2 - Specifications

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