

# TEMT6000 ambient light sensor SKU:SEN0043

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## Introduction

This module uses a special ambient light detector (TMET6000) with spectral response that closely emulates the human eye. It help you to detect the light density and reflect the analog voltage signal back to Arduino controller. You can set the threshold of voltage level to trig other unit on Arduino project.

## Feature

- Near Human Eye Spectral Response
- Scalable Output Voltage

## Specification

- Supply Voltage: DC 3.3~5.5V
- Operating Temperature: -40~85°C
- Illumination Range: 1 – 1000 Lux
- Output: analog voltage, 0 – 5V @VCC=5V
- Module Size: 30 x 22mm

## Pinout

Cable Color	Description
black	GND
red	VCC
other	output

## Sample Code

```
void setup()
{
  Serial.begin(9600); // open serial port, set the baud rate to 9600 bps
}
void loop()
{
  int val;
  val=analogRead(0);    //connect sensor to Analog 0
  Serial.println(val);   //print the value to serial
  delay(100);
}
```

## FAQ

**Q1.** Some general Arduino Problems/ FAQ/ Tips, very good to know.

**A1.** Click the topic link (<http://www.dfrobot.com/forum/viewtopic.php?f=8&t=1869&p=8624#p8624>) on DFRobot Forum.

**Q2.** The unit of the output from these sensors is? How can I convert it to LUX?

**A2.** Well, it is only a simple analog sensor that could show you the relationship of the light intensity (within its detect range) and voltage (0-5V). If you want to transfer the voltage to unit in LUX, then well, it requires that you have a commercial Light Intensity Meter like this (<http://www.ebay.com/itm/Light-Intensity-Meter-30-000-Lux-Range-2788-0-Foot-Candle-Parameter-Digital-LCD-/231475450367?hash=item35e50311ff:g:VIIAAOxy7MtRvCDj>) that can display LUX info, then you can match the readings to the sensor's analog reading, then you could a map to describe the relationship of voltage and ambient light density.

For any question/advice/cool idea to share, please visit **DFRobot Forum** (<http://www.dfrobot.com/forum/>).