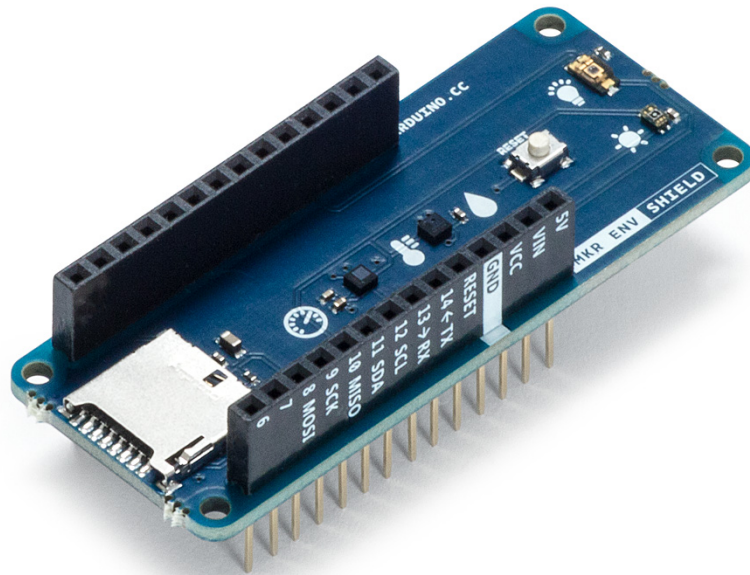




ARDUINO MKR ENV SHIELD

Code: ASX00011

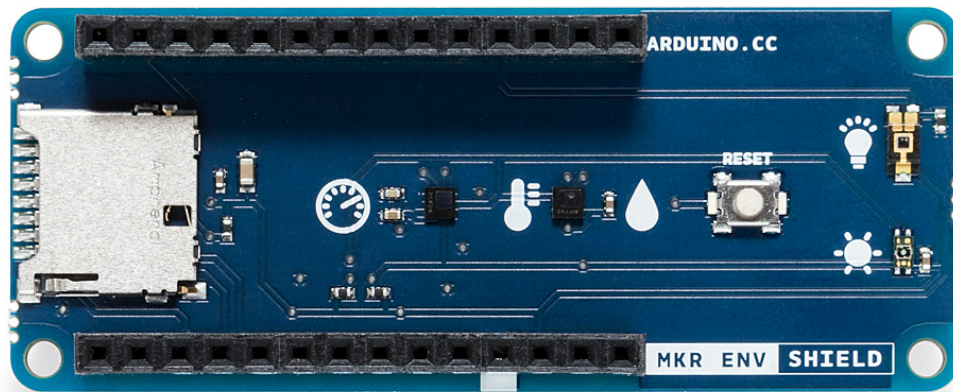
Add environmental sensors to your MKR board at a glance.



The MKR ENV Shield allows a MKR board to acquire environmental data collected by an array of sensors.

These sensors are of the latest generation and measure:

- Atmospheric pressure
- Temperature and humidity
- Ultraviolet UVA intensity Ultraviolet UVB intensity,
- UV Index (calculated)
- Light intensity (in LUX)



To help you build projects and store the data collected locally, this shield has a slot for a microSD card (not provided).

There is a ready to use library with examples and methods to read values from the different sensors, that provides an easy and smooth integration path.

Sensors used :

- ST LPS22HB : atmospheric pressure
- ST HTS221 : temperature and humidity
- VISHAY TEMT6000 : Lux of the ambient.
- VISHAY VEML6075 : UltraViolet wavelengths A / B



ICs	LPS22HB TEMT6000 VEML6075
Input Voltage	3.3V
Operating Voltage	3.3V
Ranges	Pressure: 260 to 1260 hPa rH sensitivity: 0.004% rH/LSB Humidity accuracy: $\pm 3.5\%$ rH, 20 to +80% rH UVA, UVB and UVBI measurement
Communication	I2C/Analog
Length	61 mm
Width	25 mm
Weight	32 gr.



Schematics

The Arduino MKR ENV Shield is open-source hardware! You can build your own board using the following files:

[EAGLE FILES IN .ZIP](#)

[SCHEMATICS IN .PDF](#)

Sensors used :

- ST [LPS22HB](#) : atmospheric pressure
- ST [HTS221](#) : temperature and humidity
- VISHAY [TEMT6000](#) : Lux of the ambient.
- VISHAY [VEML6075](#) : UltraViolet wavelengths A / B