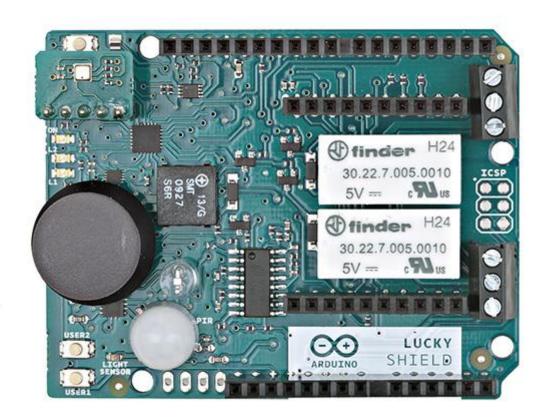
# Arduino LUCKY SHIELD

# You are lucky with Arduino Lucky Shield! A single shield with many sensors.

Arduino Lucky Shield is an easy way to use your Arduino boards, that grants you access to barometric pressure, relative altitude, luminosity, temperature, motion and presence. You can also turn it into a simple controller and OLED (organic light-emitting diode) display system. It is the perfect shield for IoT.



Arduino Lucky Shield is an easy way to use your Arduino boards, that grants you access to barometric pressure, relative altitude, luminosity, temperature, motion and presence. You can also turn it into a simple controller and OLED display system. It is the perfect shield for IoT.

Recently a restyling of the shield has been made. However the board maintained the same features.

# Warning:

If you want to use the Arduino IDE 1.8.x then download the Lucky library and import it into the IDE.

You can download it here.

TTT A	TI	IDI	FC
T C/A			

Relays OMRON G6RL-1 (5V DC)

PIR Sensor MOSDESIGN M7616

Ambient Light Sensor EVERLIGHT ALS-PT19-315C/L177/TR8

Humidity Sensor BOSCH SENSORTEC BME 280

Temperature Sensor BOSCH SENSORTEC BME 280

Pressure sensor BOSCH SENSORTEC BME 280

3-axis magnetometer NXP MAG3110

3 Axis accelerometer NXP MMA8491Q

Buzzer PUI AUDIO SMT-0927-S-6-R

Joystick 5-directional tact switch

### **GENERAL**

Operating Voltage 3.3 V / 5 V

Extra DogOLED support

PCB size 53 x 68.5 mm

Weight 0.054 Kg

Product Code A000125

#### Description

Operating voltage: 3.3 VDC / 5 VDC

**LEDs**: POWER (Green) . LED1 (Yellow) . LED2 (Yellow)

Joystick: 5-directional tact switch

Buzzer: MINIMUM SPL 90 dBA RESONANT FREQUENCY 500 Hz

Relay: 50000 operations min (NC) at 250VAC, 8A (resistive load) 50000 operations

min at 30 VDC, 5A (resistive load)

**PIR sensor**: Encapsulation type TO5, Spectral response 7~14μm, Transmittance

≥77%, Field of view 139°

Ambient light sensor: Peak sensitivity wavelength 630nm, Operating

temperature  $-40 \sim +85$  °C

**Temperature / humidity:** Operating temperature  $-40 \sim +85$  °C

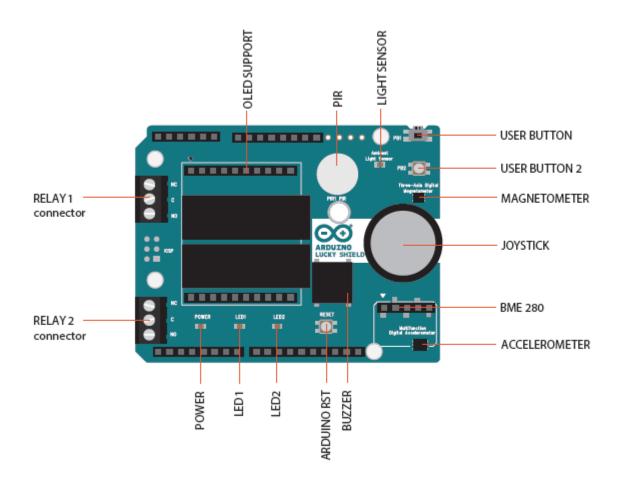
**Pressure sensor**: Operating pressure range 300 ~ 1100 hPa

**Magnetometer**: E-compass, Full-scale range ±1000 T, Output data rates (ODR) up to

80 Hz

**Accelerometer**: G-sensor, Ultra-fast data output time, ~700 μs ±8g full-scale

range 3-axis, 45° tilt outputs



#### Power

The shield doesn't need external power. It will be provided by the Arduino base board, through the 5V and 3.3V pins of the base.

# **Physical Characteristics**

The maximum length and width of the Lucky Shield PCB are 2.7 by 2.1 inches,respectively (68.6 x 53.4 mm). Four screw holes allow the Shield to be attached to a surface or case. Note that the distance between digital pins 7 and 8 is 160 mil (0.16"), not an even multiple of the 100 mil spacing of the other pins.

# Compatible Boards

The shield is compatible with all Arduino board 5V and 3.3V standards.