



# **M5GO Lite IoT Development Kit**

#### SKU: K022

**M5GO Lite** is a light pack of M5GO kit, instead of having 6 M5units, M5Go-Lite provides 1 ENV + accessories and the same M5 controller as M5GO. M5Go-Lite is also designed for STEM education. M5GO controller itself is already a full-feathered, highly integrated, upgraded development board provides plenty of hardware resources, such as LCD screen, speaker, Led bar, 16M flash, microphone and more. Light but not least.

All M5stack development board can be programmed through Arduino IDE, WebIDE UIFlow, Micropython, and Blockly, simplifying the development process for those requiring a joint hardware and software solution. Not only does M5stack have far-reaching IoT applications in industry, agriculture, and home, but it also empowers students to learn to code in STEM classrooms.

### **Product Features**

- 5V DC power supply
- USB Type-C
- ESP32-based
- 16 MByte flash + 520K RAM
- MPU9250
- Speaker, 3 Buttons, LCD(320\*240), 1 Reset
- 2.4G Antenna: Proant 440
- TF card slot (16G Maximum size)
- Battery Socket & 500 mAh Lipo Battery
- Extendable Pins & Holes
- Grove Port
- M-Bus Socket & Pins
- Development Platform <u>UIFlow</u>, <u>MicroPython</u>, <u>Arduino</u>

## **ESP32 Features**

- 240 MHz dual core Tensilica LX6 microcontroller with 600 DMIPS
- Integrated 520 KB SRAM
- Integrated 802.11b/g/n HT40 Wi-Fi transceiver, baseband, stack and LWIP
- Integrated dual mode Bluetooth (classic and BLE)
- Hall sensor
- 10x capactive touch interface
- 32 kHz crystal oscillator
- PWM/timer input/output available on every GPIO pin
- SDIO master/salve 50MHz
- SD-card interface support

## Part List

- 1x white M5GO Controller
- 1x M5GO Base
- 1x ENV Unit
- 1x GROVE Cable
- Type-C USB Cable
- User Manual



### Example

#### 1. Arduino IDE

M5GO + ENV to get weather data:



```
/*
    Install Adafruit BMP280 Library first.
*/
#include <M5Stack.h>
#include "DHT12.h"
#include <Wire.h> //The DHT12 uses I2C comunication.
#include "Adafruit_Sensor.h"
#include <Adafruit_BMP280.h>
// new two objects
DHT12 dht12;
Adafruit_BMP280 bme;
// initialization
M5.begin();
Wire.begin();
bme.begin();
// read data
float tmp = dht12.readTemperature();
float hum = dht12.readHumidity();
float pressure = bme.readPressure();
```

#### 2. UIFlow

For more details, click here



https://m5stack.com/products/m5go-lite-iot-development-board-kit/10-2-19