CO2L 🛒

Description

UNIT CO2L is a digital air CO2 concentration detection unit with a single-measurement low-power mode, built-in Sensirion's SCD41 sensor and power buck circuitry, and I2C communication. The unit is suitable for the measurement of air ambient conditions with a typical accuracy of ± (40 ppm + 5 % reading) for CO2 measurements over a measuring range of 400 ppm – 5000 ppm while measuring ambient temperature and humidity.

Features

- CO2 concentration detection
- Temperature and humidity measurement
- Low power consumption (single measurement supported)
- Integrated 5V -> 3.3V LDO
- HY2.0 4P interface
- 2x LEGO compatible holes

Applications

- CO2 concentration detection
- Temperature and humidity monitoring

Specification

Specification

Resources	Parameters
sensor	SCD41
CO2 measurement range	400 ~ 5000 ppm
CO2 sampling accuracy	±(40 ppm + 5% of reading)
Temperature range	-10 - 60 °C
Humidity range	0 - 95 %RH
Communication protocol	I2C:0x62
Product Size	48mm × 24mm × 16mm
Package Size	136mm × 92mm × 13mm
Product Weight	7.4g
Package Weight	12.3g

Related Link

- SCD41

Schematic
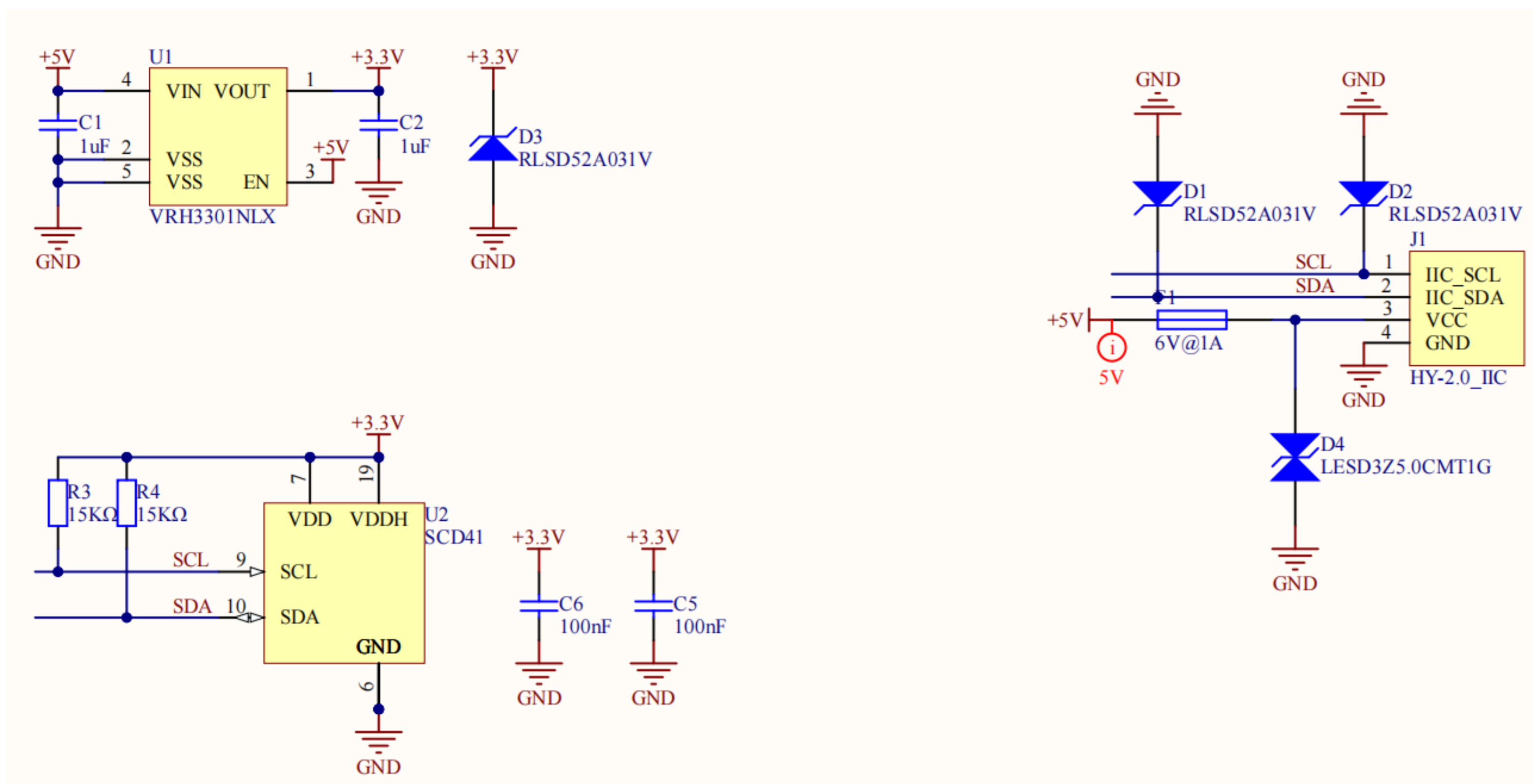
Module Size
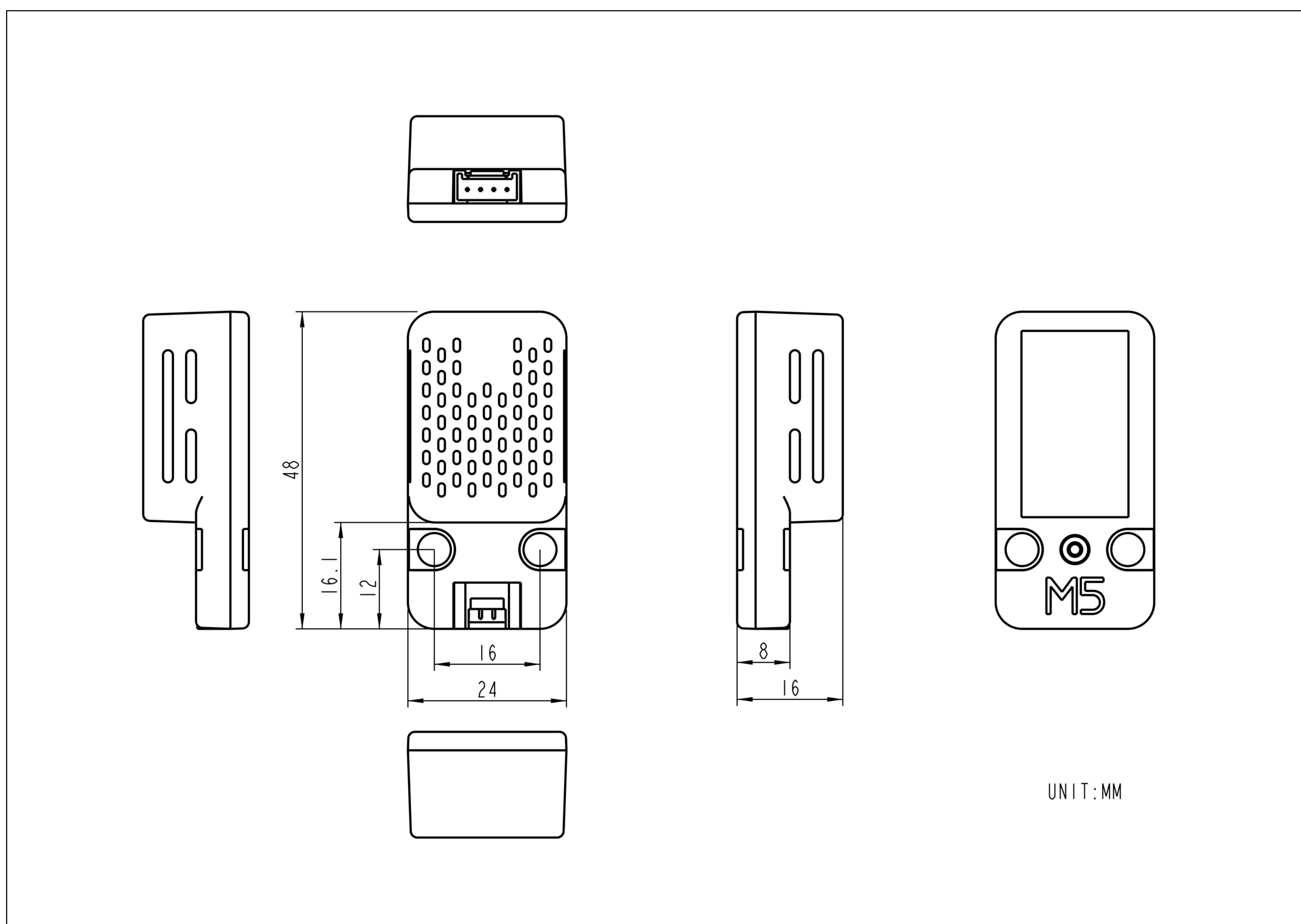
Examples

Arduino
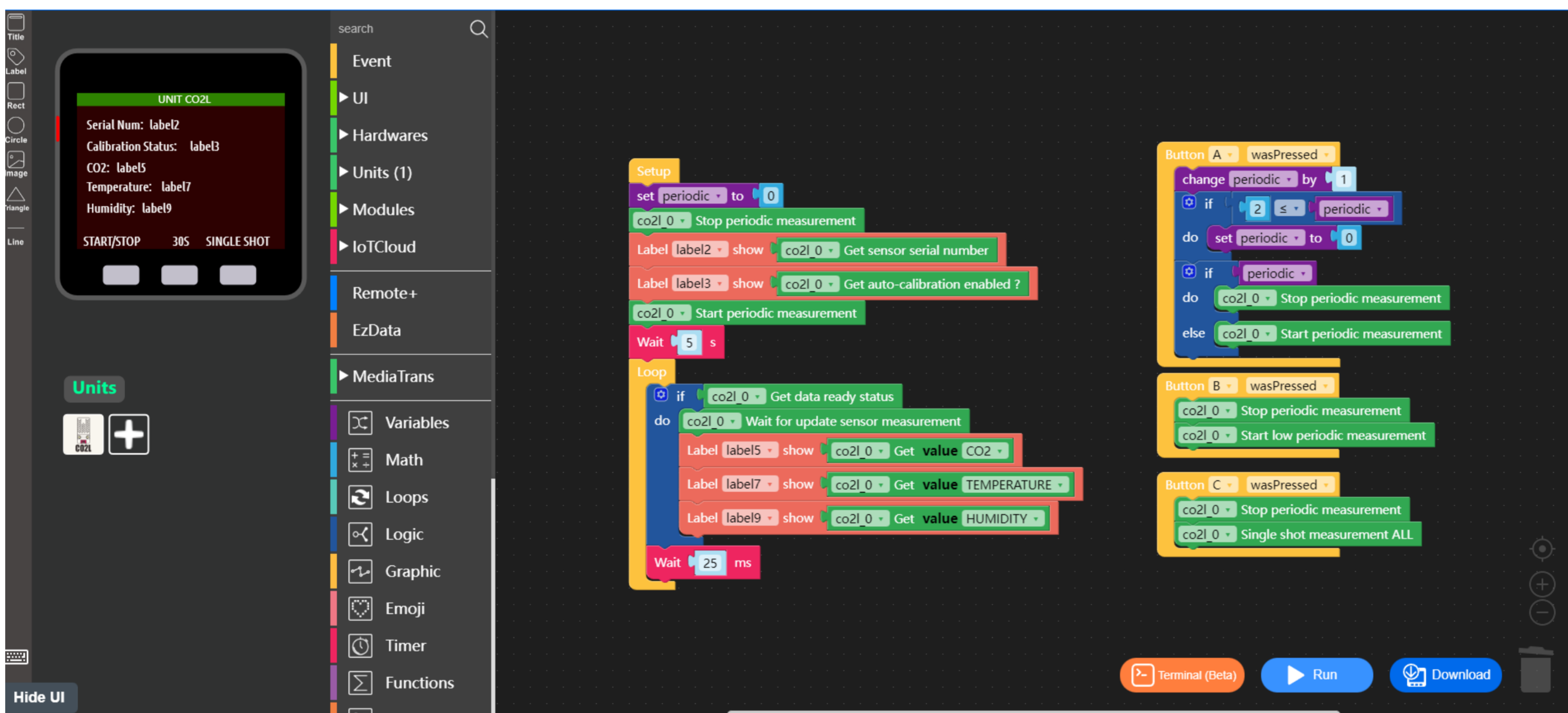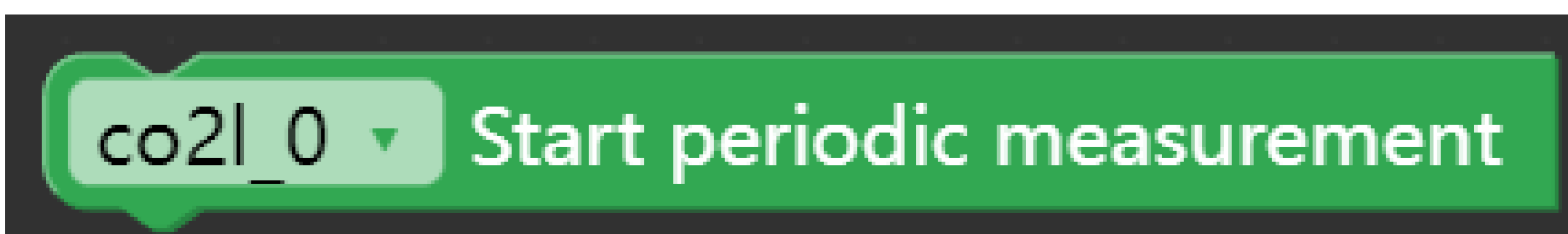
UIFlow

UIFlow Blocks

- Start periodic measurement

- Stop periodic measurement

- Wait for update sensor measurement

co2l_0 ▾ Wait for update sensor measurement

- Set temperature offset

co2l_0 ▾ Set temperature offset ⟨ 4

- Set sensor altitude height

co2l_0 ▾ Set sensor altitude height ⟨ 0 M

- Set ambient pressure

co2l_0 ▾ Set ambient pressure ⟨ 0 hPa

- Perform forced recalibration CO2

co2l_0 ▾ Perform forced recalibration CO2 ⟨ 400 PPM

- Set auto-calibration

co2l_0 ▾ Set auto-calibration ENABLE ▾

- Start low periodic measurement

co2l_0 ▾ Start low periodic measurement

- All settings save EEPROM

co2l_0 ▾ All settings save EEPROM

- Perform self test

co2l_0 ▾ Perform self test

- Perform factory reset

co2l_0 Perform factory reset

- Re-initializes sensor

co2l_0 Re-initializes sensor

- Single shot measurement all

co2l_0 Single shot measurement ALL

- Single shot measurement humidity and temperature

co2l_0 Single shot measurement HT

- Set sensor sleep mode

co2l_0 Set sensor sleep mode

- Sensor wake up

co2l_0 Sensor wake up

- Get co2/humidity/temperature value

co2l_0 Get value CO2

- Get data ready status

co2I_0 ▾ Get data ready status

- Get temperature offset

co2I_0 ▾ Get temperature offset

- Get sensor altitude

co2I_0 ▾ Get sensor altitude

- Get auto-calibration enabled ?

co2I_0 ▾ Get auto-calibration enabled ?

- Get sensor serial number

co2I_0 ▾ Get sensor serial number