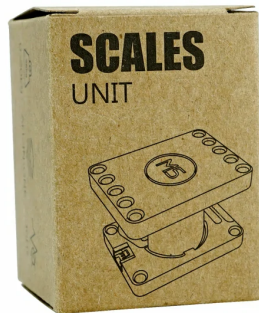


Unit Scales

SKU:U108



Description

Unit Scales is a 20 kg integrated weighing sensor unit with an I2C interface. It integrates an **STM32F030** microcontroller, acquisition circuit, and a 20 kg weighing sensor internally. The unit uses the **HX711** dedicated weighing acquisition chip, features a tare button, and a programmable **RGB** status indicator. Users can read weight data via the I2C interface. This unit provides a highly integrated weighing detection solution, suitable for applications such as quality inspection, piece counting, and object movement detection.

Features

- HX711:
 - High-precision 24-bit ADC
 - Programmable gain amplification of 32, 64, and 128
 - 10SPS output data rate
- I2C interface
- Development platforms: Arduino, UIFlow (Blockly, Python)

Includes

- 1 x Unit Scales
- 1 x HY2.0-4P Grove cable (20cm)

Applications

- Smart scales
- Kitchen scales
- Item counting devices
- Human presence detection

Specifications

Specification	Parameter
MCU	STM32F030F4P6
ADC	HX711
Communication Interface	I2C @0x26
LED	SK6812 (PA7 interface)
Button	PA2 interface
Housing Material	Plastic
Product Size	56.0 x 40.0 x 41.0mm
Product Weight	82.4g
Package Size	57.0 x 42.0 x 41.0mm
Gross Weight	91.2g

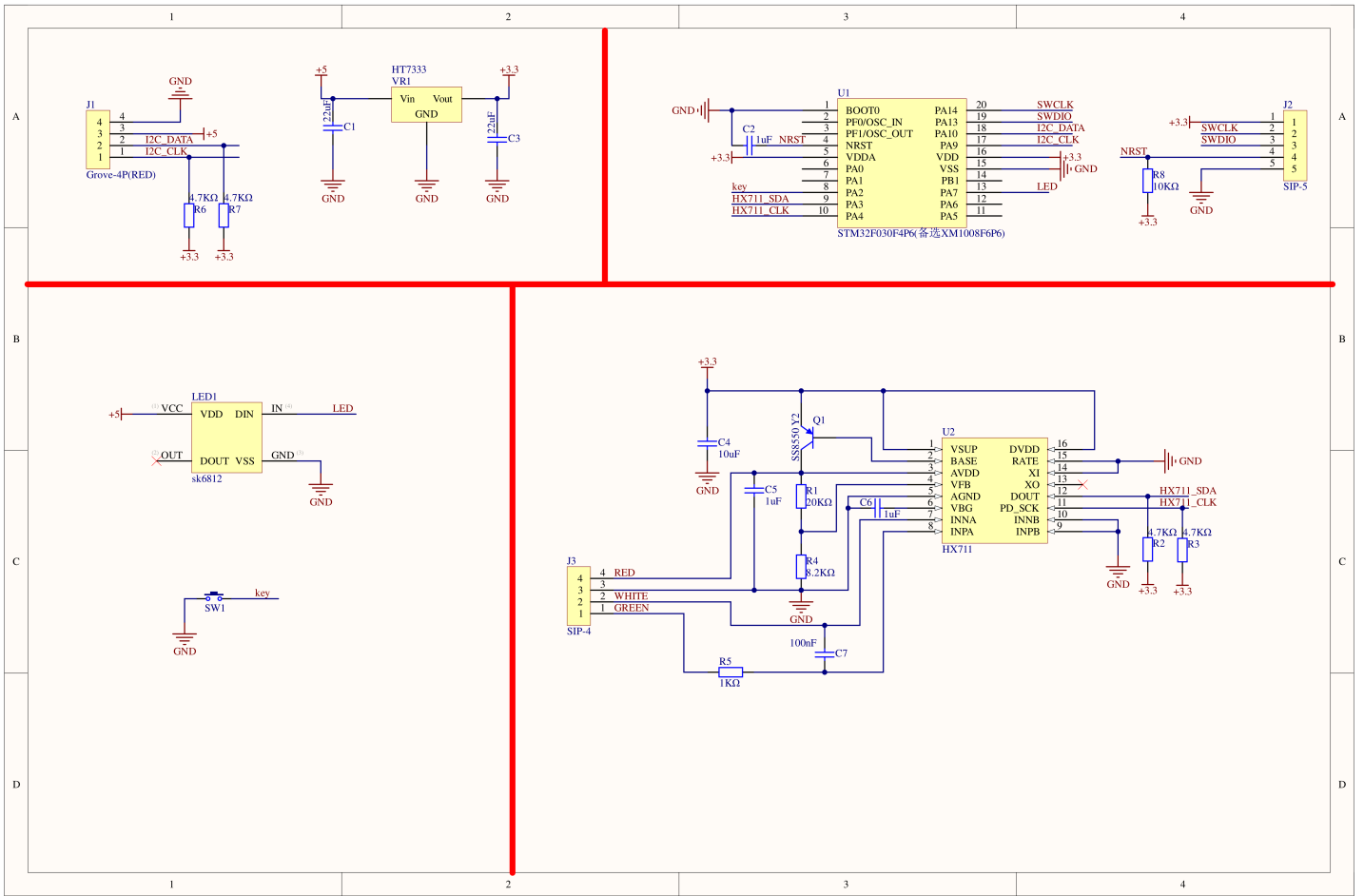
Learn

Unit Scales Weighing Error Description

重量 (g)	50	100	250	500	1000
Absolute Error (g)	0.45	0.25	0.20	0.25	4.15
Relative Error	0.9%	0.3%	0.1%	0.1%	0.4%

Schematics

- [Unit Scales Schematics PDF](#)

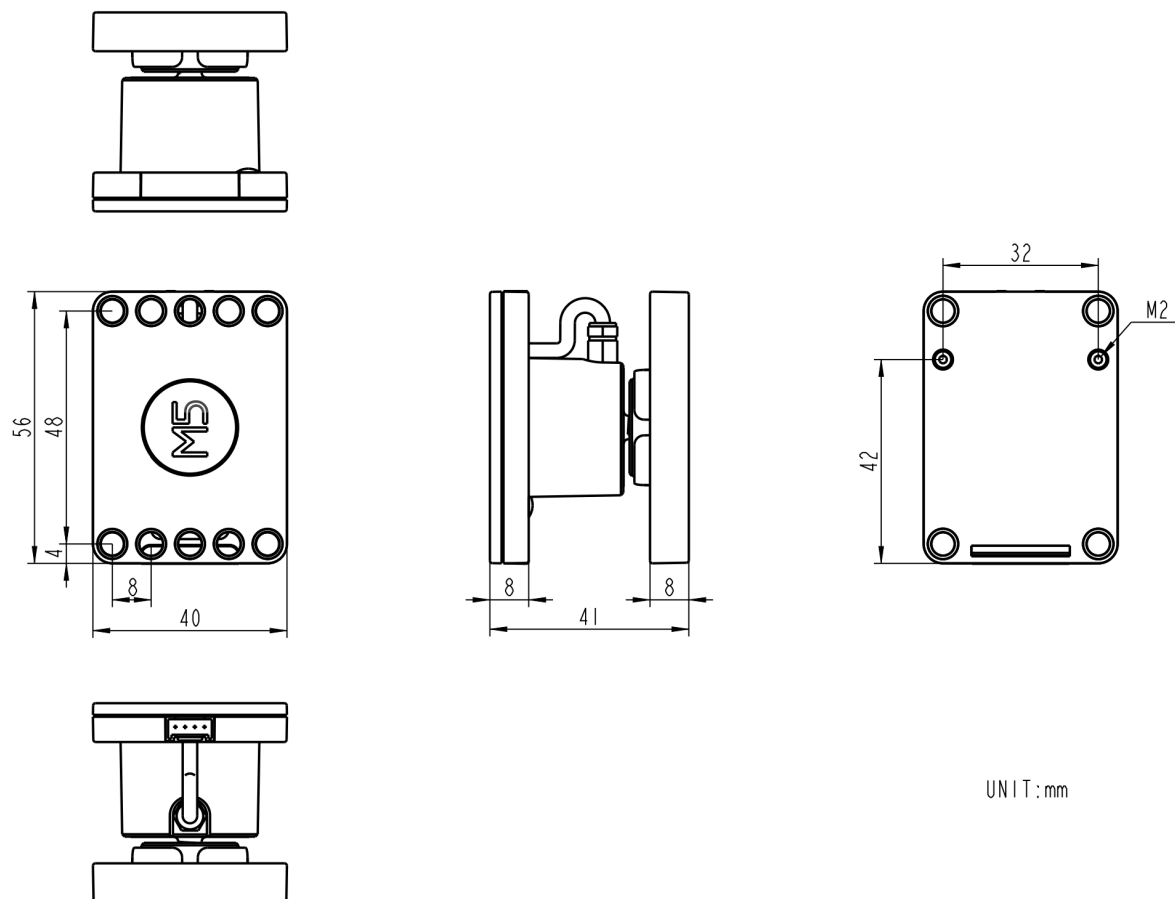


PinMap

Unit Scales

HY2.0-4P	Black	Red	Yellow	White
PORT.A	GND	5V	SDA	SCL

Model Size



Datasheets

- [HX711](#)

Softwares

Arduino

- [Config Scales Unit I2C Address](#)
- [Scales Demo for Basic](#)
- [Scales Demo for ATOM](#)

UiFlow1

- [Unit Scales UiFlow1 Docs](#)

UiFlow2

- [Unit Scales UiFlow2 Docs](#)

Internal Firmware

- [Unit Scales Internal Firmware](#)

Protocol


- [Unit Scales I2C Protocol](#)

EasyLoader

Easyloader	Download Link	Note
Unit Scales Test Easyloader	download	/

Video

Product Comparison

Product Compare			 Unit Mini Scales		
	Unit Scales	Scales Kit	Scales	Unit Weight	Unit Weight-I2C
Communication Protocol	I2C	ADC	I2C	ADC	I2C
Chip Solution	STM32+HX7 11	HX711	STM32+HX7 11	HX711	STM32+HX711
Sensor Range	0 ~ 20kg	0 ~ 200kg	0 ~ 5kg	Depends on the strain gauge and controller chip	Depends on the strain gauge and controller chip