

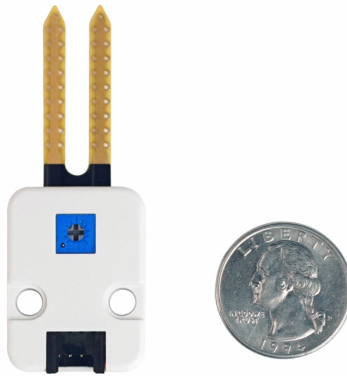
Unit Earth

SKU:U019



ANALOG
& DIGITAL
OUTPUT

GPIO
INTERFACE



Description

Unit Earth is a soil moisture sensor used for collecting moisture in soil or similar materials. The sensor has two measurement probes that are inserted into the soil to be measured. Since higher moisture content results in better conductivity, the potential difference between the two probes is measured and converted via ADC, and the detection result is sent to the M5Core. The Unit also integrates a 10K adjustable resistor for adjusting the detection threshold.

Features

- Integrated 10K adjustable resistor for threshold adjustment.
- Analog & Digital Output
- HY2.0-4P interface, supports [UIFlow](#) and [Arduino](#)
- 2 x LEGO compatible holes

Includes

- 1 x Unit Earth

- o 1 x HY2.0-4P Grove connection cable (20cm)

Applications

- o Potted soil moisture monitoring

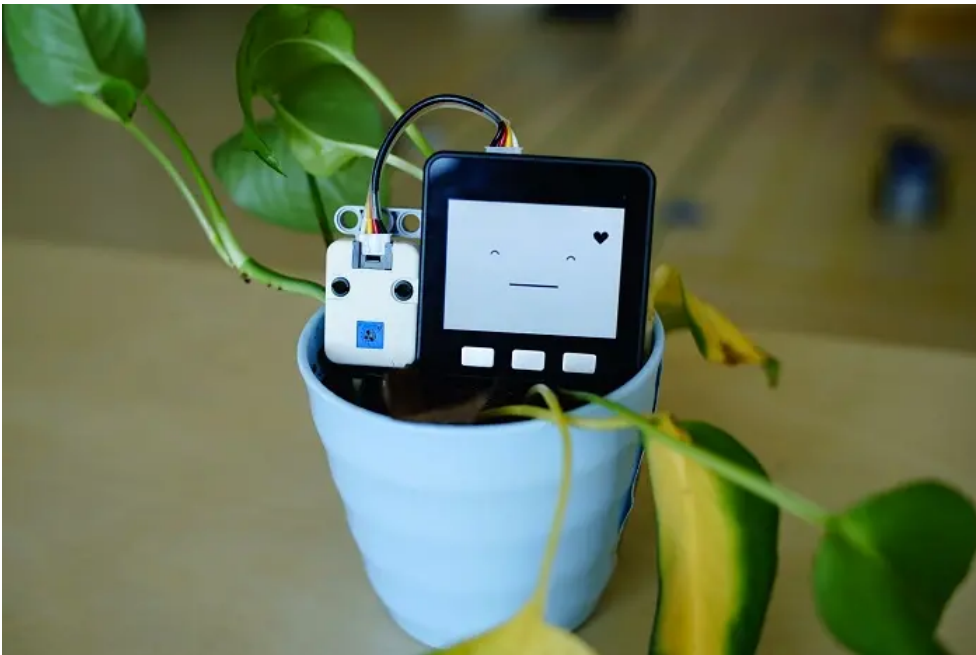
Specifications

Specification	Parameter
Product Size	64.3 x 24.0 x 8.0mm
Product Weight	5.0g
Package Size	138.0 x 93.0 x 9.0mm
Gross Weight	10.0g

Learn

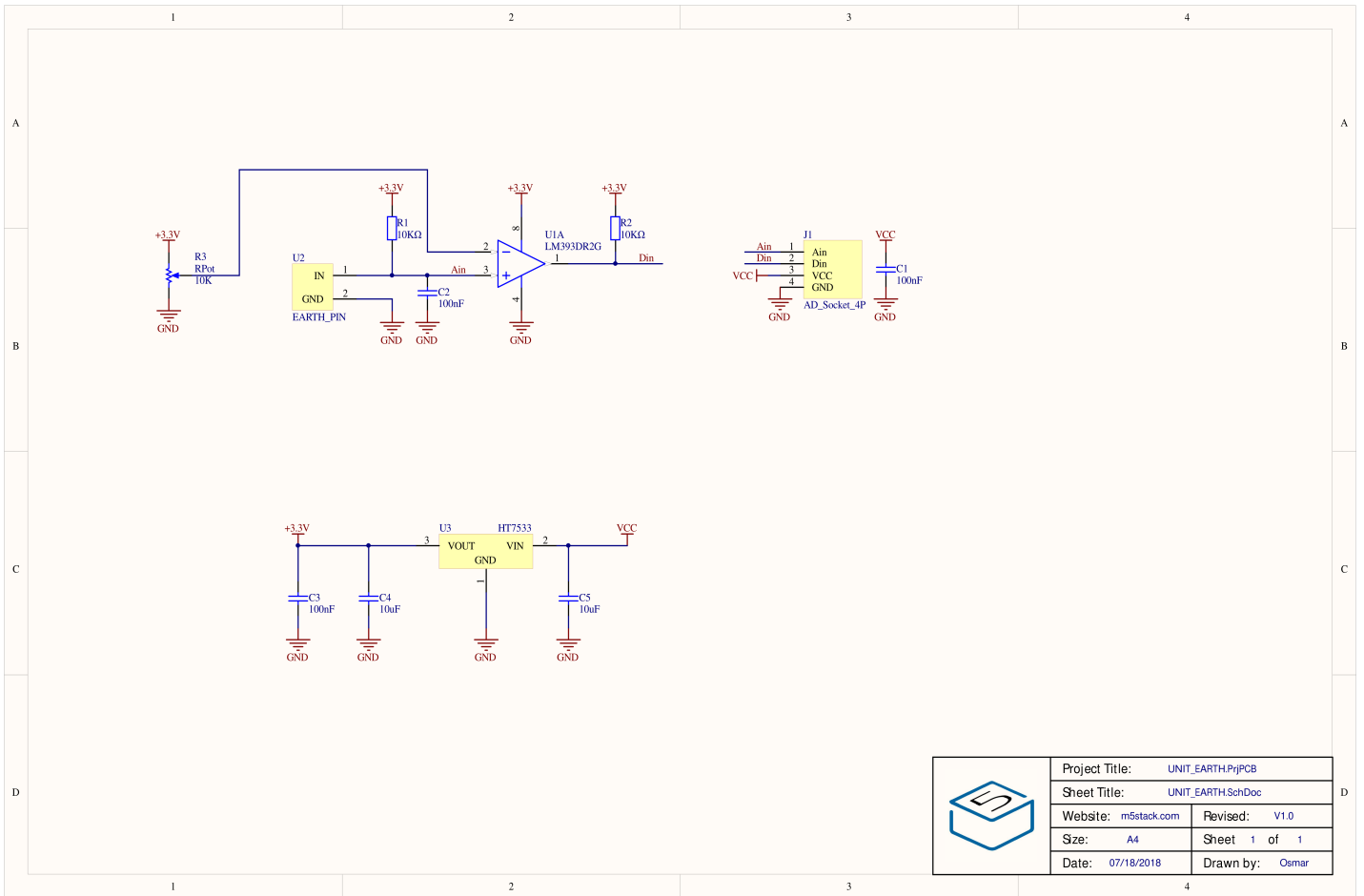
Note


The electrodes of this module are not corrosion-resistant or waterproof and are intended only for proof of concept. Please do not leave them in a humid environment for an extended period.



Schematics

- o [Unit Earth Schematics PDF](#)



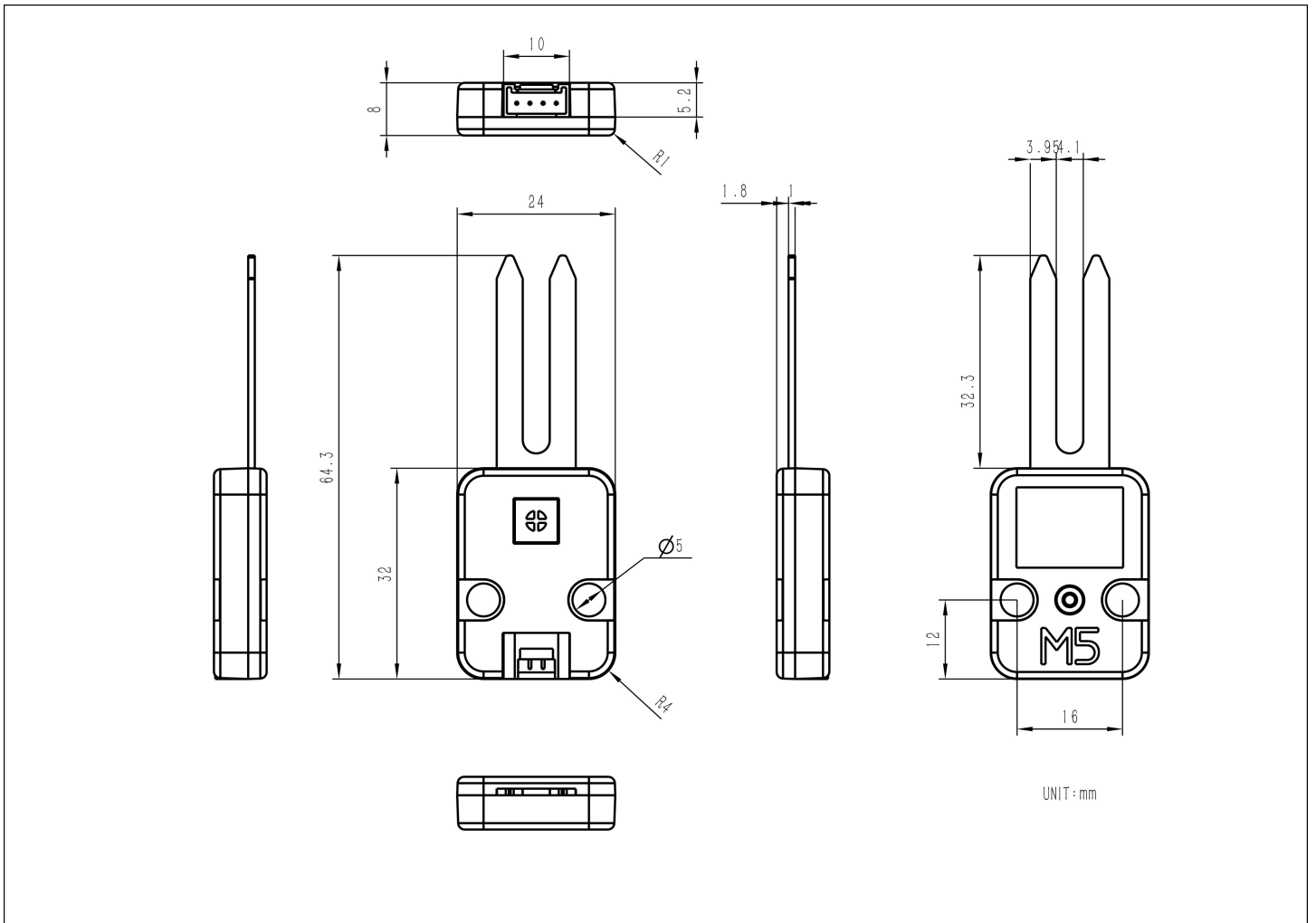
	Project Title:	UNIT_EARTH.PjPCB
	Sheet Title:	UNIT_EARTH.SchDoc
	Website:	m5stack.com
	Revised:	V1.0
Size:	A4	Sheet 1 of 1
Date:	07/18/2018	Drawn by: Osmar

PinMap

Unit Earth

HY2.0-4P	Black	Red	Yellow	White
PORT.B	GND	5V	Digital Output	Analog Output

Model Size



Structure

- [Unit Earth Structure Files](#)

Softwares

Arduino

- [Unit Earth Test Example](#)

UiFlow1

- [Unit Earth UiFlow1 Docs](#)

UiFlow2

- [Unit Earth UiFlow2 Docs](#)

EasyLoader

Easyloader	Download Link	Note
Unit Earth Test Easyloader	download	/

| Video

EARTH Tutorial - Monitoring Vase Soil Moisture

[\(M5stack x Arduino\) Do plants have feelings.mp4](#)