

# Unit Laser TX

SKU:U066

UNIT  
LASER.TX

M5STACK



WL: 650NM  
PWR: 5mW  
**LASER EMITTER**

**GPIO**  
INTERFACE



## Description

**Unit Laser TX** is a high-performance laser transmitter with a laser diode as its core component. This device enables wireless communication connections through the atmosphere. Apart from the beam transmission in free space, its working principle is similar to that of a fiber optic link. Although the transmitter and receiver need to meet line-of-sight conditions, laser communication devices do not require broadcasting rights or licenses, nor do they require the laying of underground cables. With its compact size, low power consumption, and no need for radio interference research, laser communication systems can be easily deployed in various locations.

## Note

### Warning

Lasers can cause harm to the human body. Therefore, when using this product, do not aim it at people, and prevent the laser beam from entering the eyes to avoid injury.

## Features

- Laser transmission
- Pairs with LASER.RX
- 2 x LEGO-compatible holes
- Development platform: Arduino, UIFlow (Blockly, Python)

## Includes

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

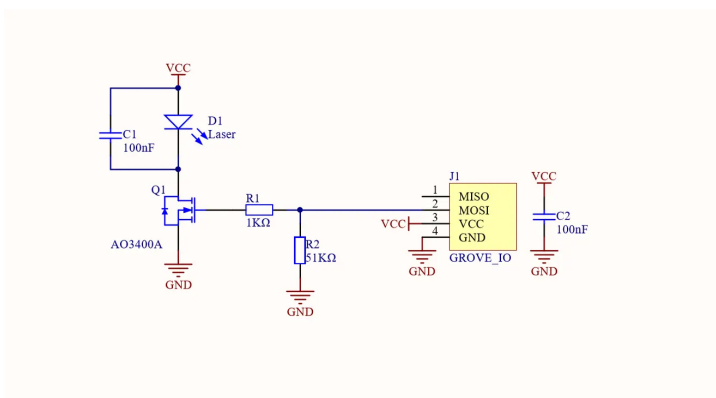
## Applications

- Space laser communication systems

## Specifications

Specification	Parameter
Operating Voltage	5V
Product Size	32.0 x 24.0 x 8.0mm
Product Weight	4.9g
Package Size	138.0 x 93.0 x 9.0mm
Gross Weight	10.0g

## Schematics



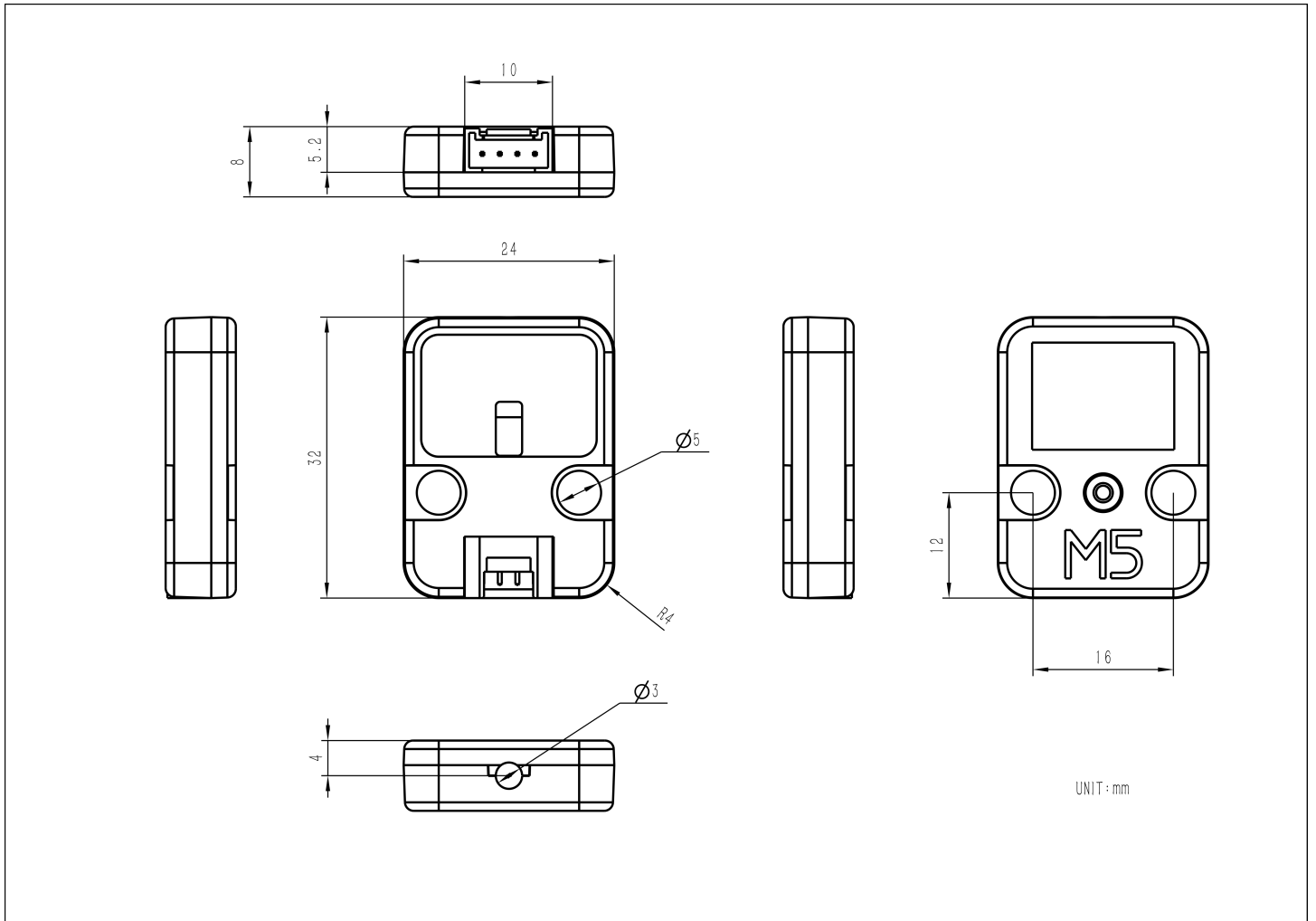
## PinMap

### Unit Laser TX

HY2.0-4P	Black	Red	Yellow	White
PORT.B	GND	5V	DIN	NC

## Model Size

- [Unit Laser TX Dimension Diagram PDF](#)



## Softwares

### Arduino

- [Unit Laser TX Test Example](#)

### UiFlow1

- [Unit Laser TX UiFlow1 Docs](#)

### UiFlow2

- [Unit Laser TX UiFlow2 Docs](#)

## EasyLoader

Easyloader	Download Link	Remarks
Unit Laser TX Test Example Easyloader	<a href="#">download</a>	/

## Video

---

[LASER-TX-RX.mp4](#)