Unit PoE CAM-W v1.1

SKU:U121-B-V11

Description

Unit PoE CAM-W v1.1 is a programmable PoE camera based on the "ESP32+W5500" solution, equipped with a built-in 3MP OV3660 image sensor featuring a 66.5° field of view, and integrating PoE (Power over Ethernet, max power consumption 6W) and Wi-Fi functions. It features 16MB Flash and 8MB PSRAM, with a reserved program download interface. This camera is equipped with abundant interfaces and functional modules, including a button (G37), LED indicator (G0), Grove interface (EXT_PORT), and expansion IO pins, along with a camera mounting clip and LEGO-compatible clamp. Suitable for image monitoring, remote acquisition, smart home, industrial automation, and other fields.

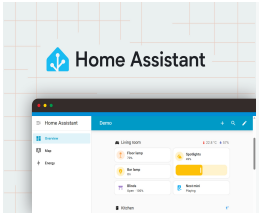
Tutorial

Arduino IDE

This tutorial will introduce you to how to program and control the Unit PoE CAM-W v1.1 device using Arduino IDE

Quick Start

This tutorial will introduce the M5PoECAM-W V1.1 device tutorial & quick start



Home Assistant

This tutorial shows how to add Unit PoE Cam to your Home Assistant

Features

- Built-in ESP32-D0WDQ6-V3 (supports 2.4G Wi-Fi)
- 3MP camera OV3660
- Ethernet chip W5500
- LAN speed up to 10M or 100M (depending on the provided connection)
- PoE IEEE802.3 AF standard (max power 6W)
- Built-in LED indicator
- Standard RJ45 Ethernet interface
- Compatible with standard LEGO interface and comes with camera mount
- Development Platform: Arduino, ESP-IDF

Includes

- 1 x Unit PoE CAM-W v1.1
- 1 x Camera Mounting Clip
- 1 x LEGO-Compatible Clip

Applications

- Warehouse monitoring
- Timed photography
- Machine vision
- Smart home monitoring

Specifications

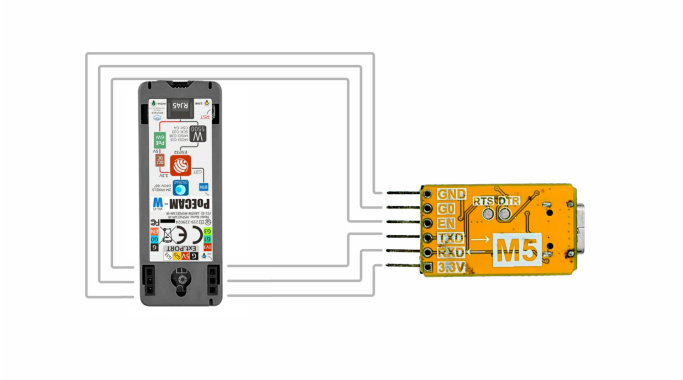
Specification	Parameter
SoC	ESP32-D0WDQ6-V3
Camera Module	OV3660@3Megapixel
DFOV	66.5°
Ethernet Chip	W5500
Flash	16MB
PSRAM	8MB
Wi-Fi	802.11 b/g/n
Pixel Size	1.75μm x 1.75μm
Output Format	RAW RGB565/555/444 YUV422/420 YCbCr422 JPEG
Auto Image Control	Auto Exposure Control (AEC) Auto Gain Control (AGC) Auto White Balance (AWB) Auto Band Filter (ABF) and Auto Black Level Calibration (ABLC)
Supported TCP/IP	TCP, UDP, ICMP, IPv4, ARP, IGMP, PPPoE
Ethernet Interface	RJ45
PoE	PoE IEEE802.3 AF standard (max power 6W)
Product Size	64.0 x 24.0 x 18.0mm
Product Weight	20.6g
Package Size	80.0 x 38.0 x 33.0mm
Gross Weight	44.6g

Learn

Notes for Use

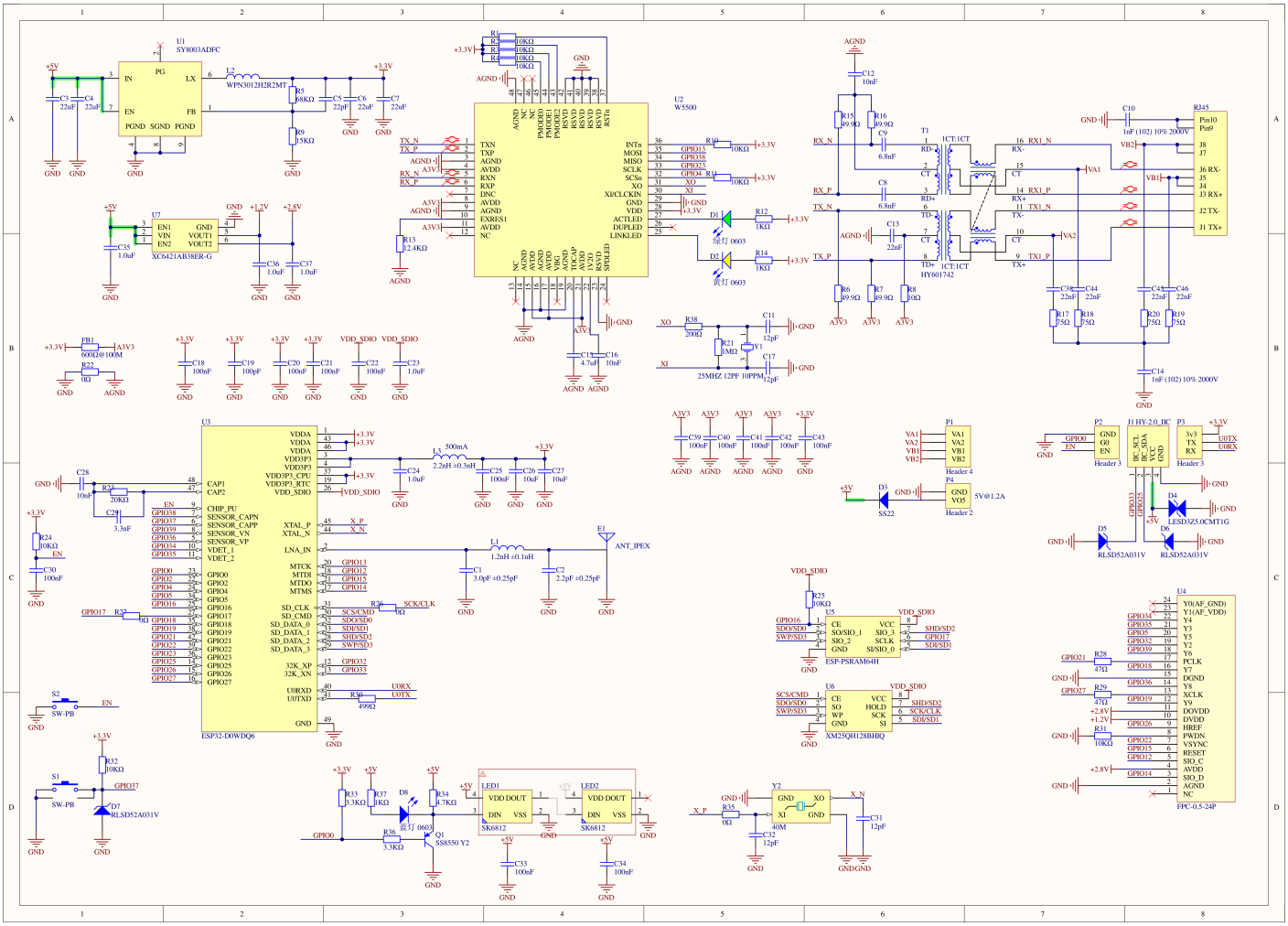
Continuous acquisition of high-resolution image streams by the camera may cause the device to overheat and result in abnormal image colors. For prolonged operation, additional cooling is recommended.

Program download diagram



Schematics

- Unit PoE CAM-W v1.1 Schematics PDF



PinMap

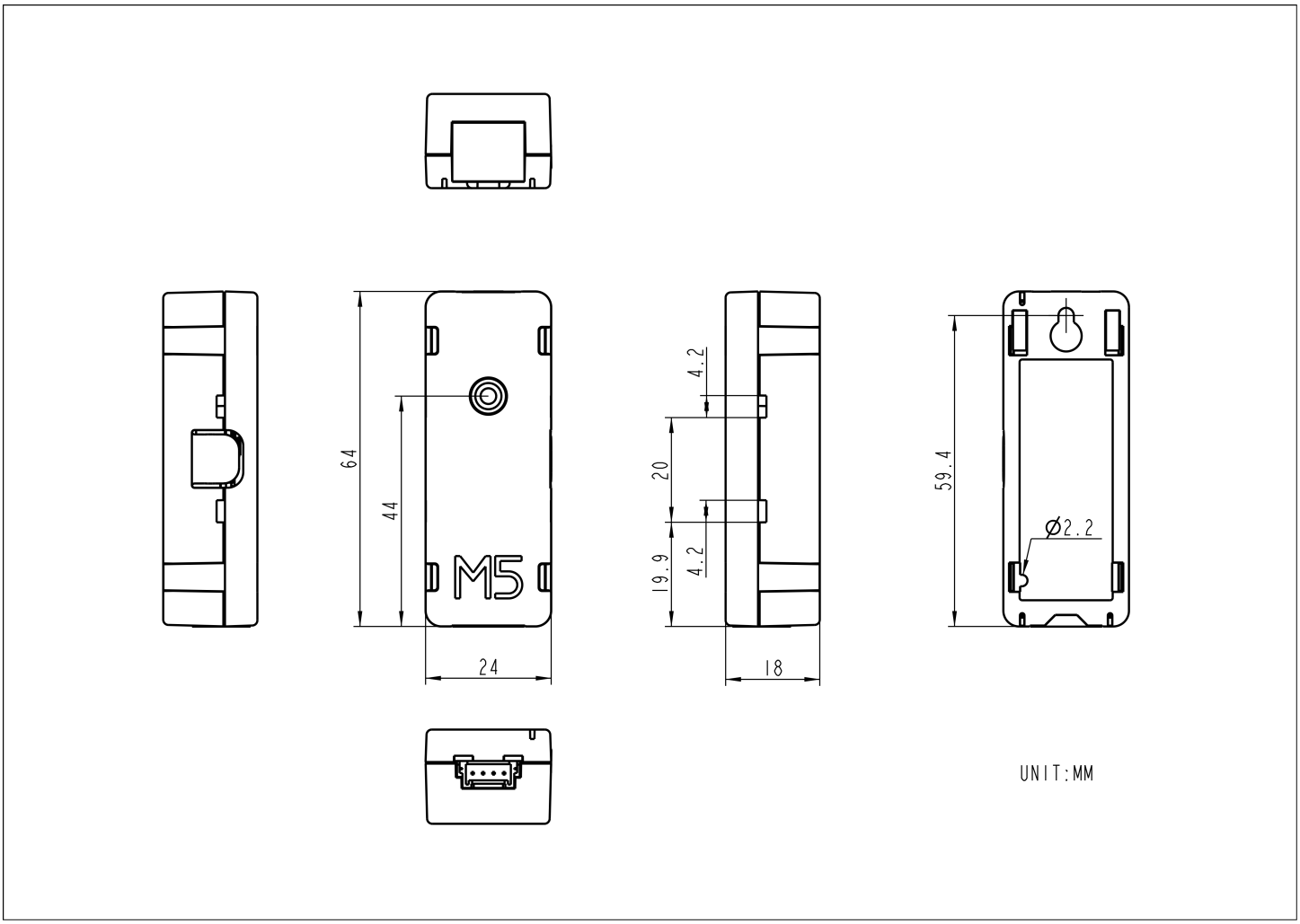
- Grove interface & Button & LED indicator

ESP32-D0WDQ6-V3	G33	G25	5V	GND	G37	G0
Grove	SCL	SDA	VCC	GND		
Button					Button	
LED (Blue)						LED

- Expansion pins (download pins)

ESP32-D0WDQ6-V3	CHIP_UP	G0	GND	VCC	G1	G3
Expansion pin	EN	G0	G	3.3V	G1	G3

Model Size



Datasheets

- ESP32-D0WDQ6-V3
- OV3660
- W5500

Softwares

Arduino

- Unit PoE CAM-W v1.1 Arduino Quick Start
- Unit PoE CAM-W v1.1 Arduino Library
- Unit PoE CAM-W v1.1 Button Example
- Unit PoE CAM-W v1.1 Capture Example
- Unit PoE CAM-W v1.1 HTTP POST Example
- Unit PoE CAM-W v1.1 LED Control Example
- Unit PoE CAM-W v1.1 RTSP Example
- Unit PoE CAM-W v1.1 Web CAM Example

EasyLoader

Easyloader	Download	Note
Unit PoE CAM-W v1.1 Firmware Easyloader	download	/

Video

- Unit PoE CAM-W V1.1 HTTP STREAM