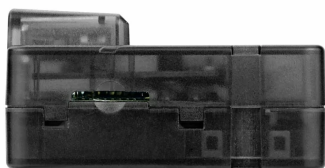


UnitV2-USB

SKU:U078-USB



Description

UnitV2-USB is a high-efficiency AI recognition module launched by M5Stack, featuring the Sigmstar SSD202D (integrated **dual-core Cortex-A7 1.2GHz processor**) as the control core, with **128MB DDR3 memory** and **512MB NAND Flash**. It provides a USB Type-A universal interface, allowing connection to various **UVC cameras**. It comes with an embedded **Linux** operating system, rich software and hardware resources, and development tools, aiming to deliver a plug-and-play, simple, and efficient AI development experience.

| Features

- Sigmstar SSD202D
- Dual-core Cortex-A7 1.2GHz processor
- 128MB DDR3
- 512MB NAND Flash
- USB-A universal interface, compatible with various UVC cameras
- Wi-Fi 2.4GHz
- Development methods:
 - Pre-installed with 12 common AI image functions: QR code, face detection, line tracking, motion detection, shape matching, image streaming, classification, color tracking, face recognition, object tracking, shape detection, custom object recognition
 - Supports web online preview, UIFlow (used for serial port JSON format calls)
 - Linux environment (OpenCV, SSH, JupyterNotebook)

| Includes

- 1 x UnitV2-USB
- 1 x 16GB microSD card
- 1 x USB Type-C cable (50cm)
- 1 x Stand
- 1 x Clip

| Applications

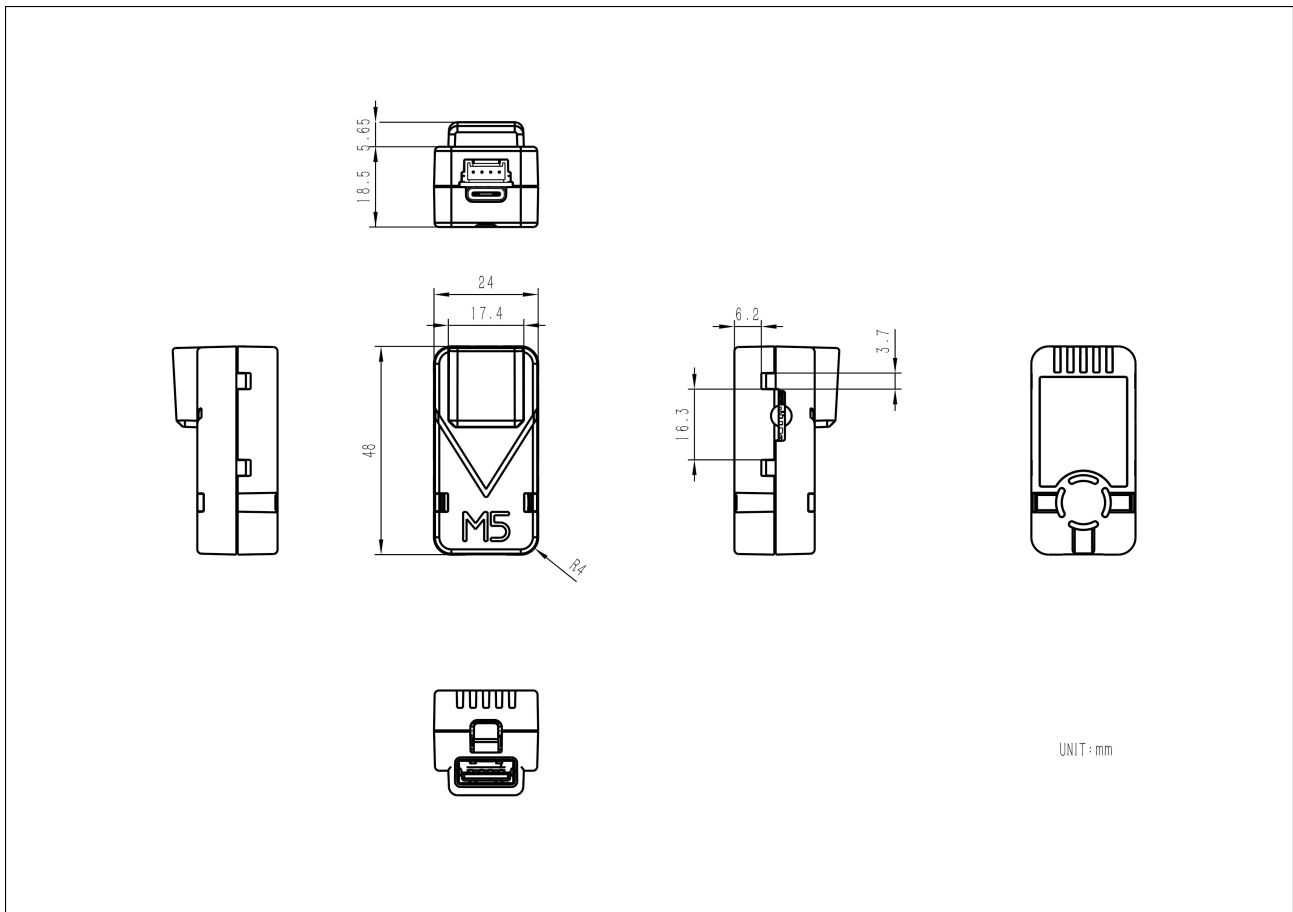
- AI recognition function development
- Industrial visual recognition and classification
- Machine vision learning

| Specifications

Specification	Parameters
Sigmstar SSD202D	Dual Cortex-A7 1.2GHz Processor
Flash	512MB NAND
RAM	128MB-DDR3
Camera	No lens included, USB-A universal interface, compatible with various UVC cameras
Input Voltage	5V @ 500mA
Hardware Peripherals	Type-C x1, UART x1, TFCard x1, Button x1, Microphone x1, built-in active cooling fan x1
Indicators	Red, White
Wi-Fi	150Mbps 2.4GHz 802.11 b/g/n
Ethernet Card	SR9900

| Product Size | 48.0 x 24.0 x 24.2mm | | Product Weight | 20.0g | | Package Size | 146.0 x 44.0 x 37.0mm | | Gross Weight | 54.8g |

| Model Size



Softwares

Quick Start

- UnitV2 integrates a basic AI recognition service developed by M5Stack, with built-in multiple recognition functions (such as face recognition, object tracking, etc.), helping users quickly build AI recognition applications.
- All functions are plug-and-play! UnitV2 comes with a built-in wired network card. When connected to a PC via the Type-C interface, it automatically establishes a network connection with UnitV2. It can also be connected and debugged via Wi-Fi, offering high flexibility.
- UART serial output, all recognition results are automatically output in **JSON** format via the serial port for easy invocation.
- [Built-in Recognition Function Tutorial](#)
- [V-Training Online AI Model Training Service](#)
- [Jupyter Notebook Development Tutorial/Example](#)
- [SSH Connection & WIFI Configuration](#)
- [Firmware Update Tutorial](#)

SDK

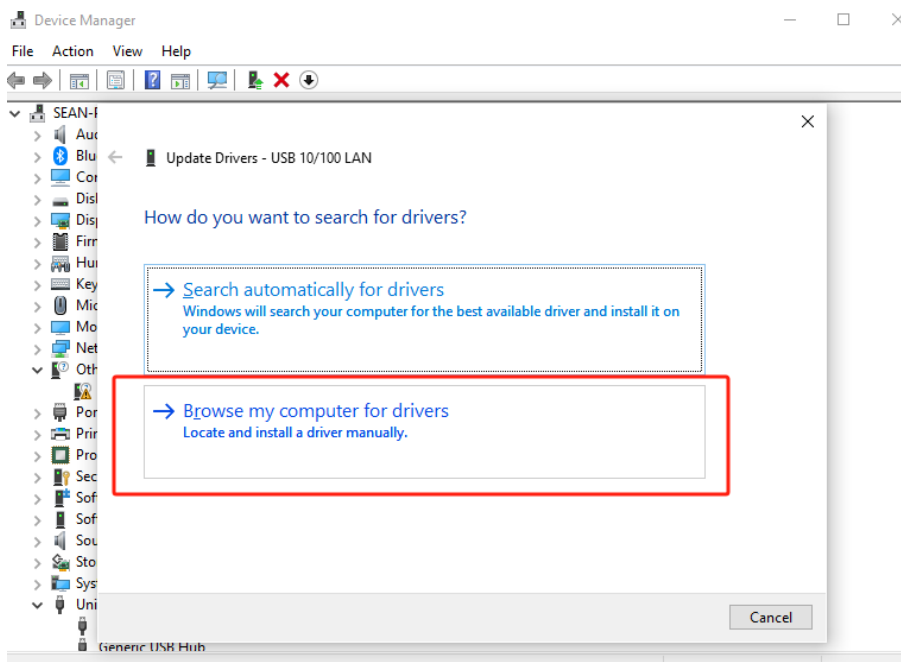
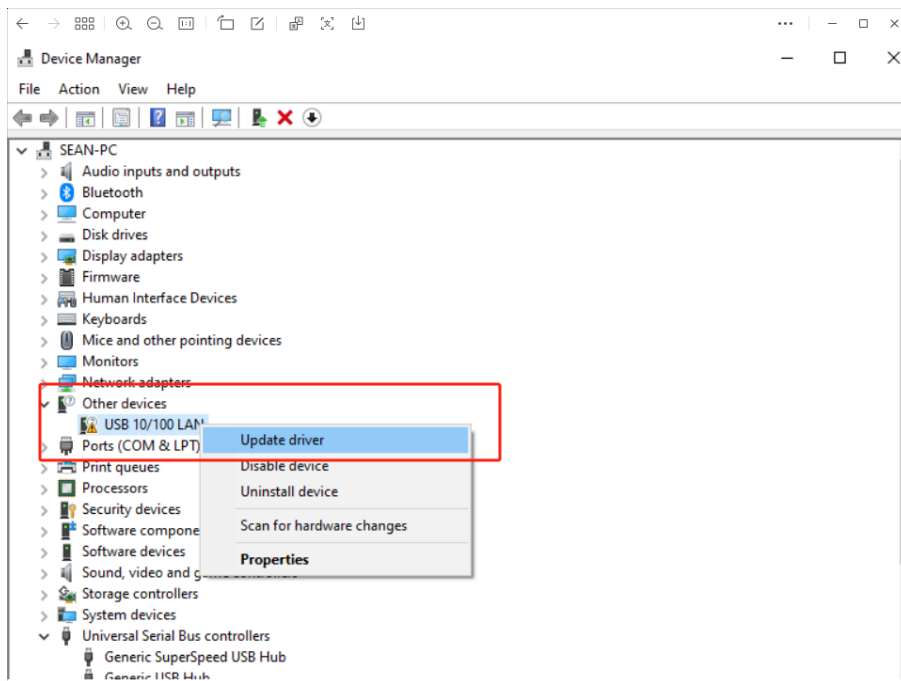
- [UnitV2Framework](#)

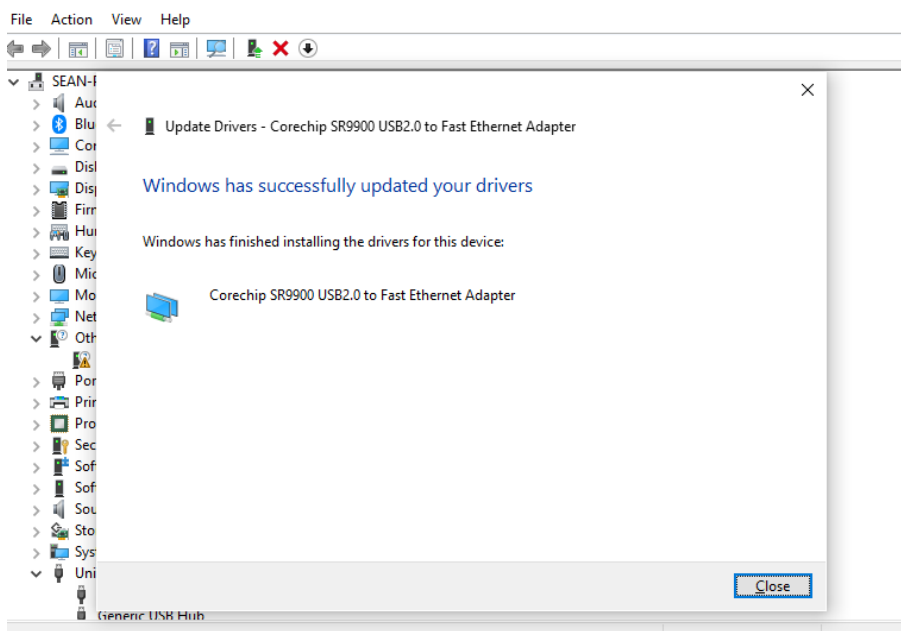
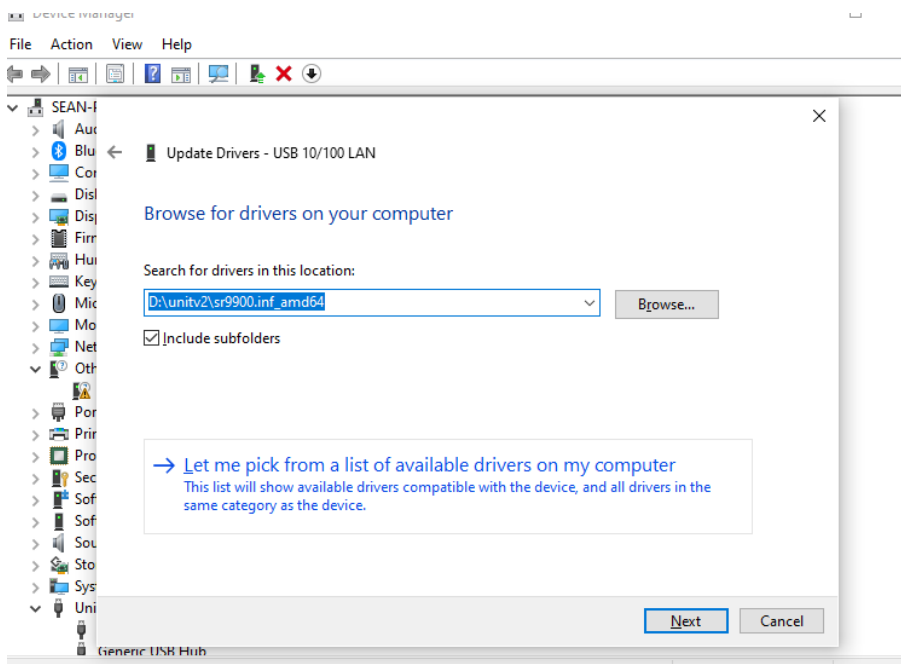
| USB Driver

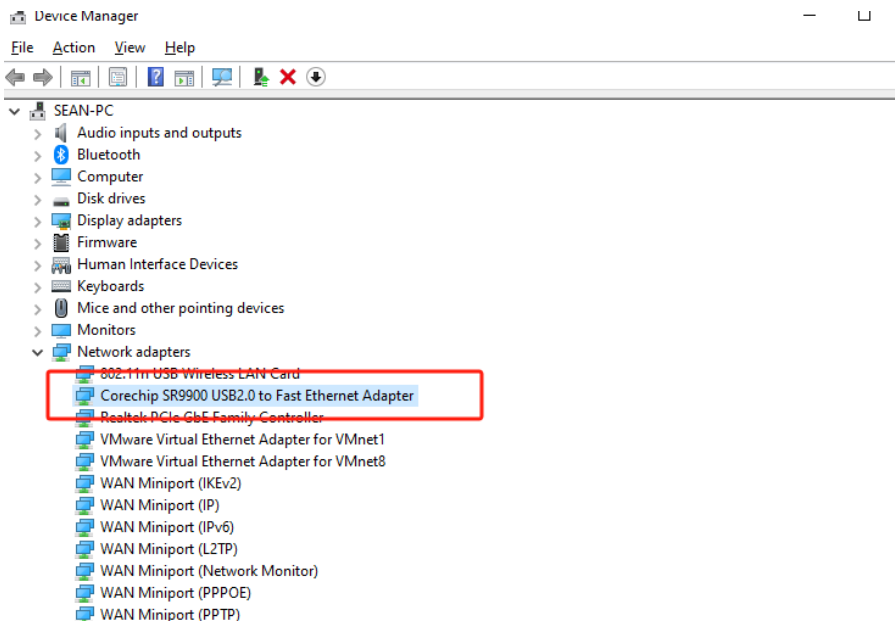
Driver Name	Download Link
SR9900_Windows	Download
SR9900_MacOS	Download

| For Windows10

- Extract the driver package to the desktop path -> Open Device Manager and select the unrecognized device (named **USB 10/100 LAN** or containing **SR9900**) -> Right-click and select custom update -> Choose the extracted path of the driver package -> Click confirm and wait for the update to complete.







For MacOS

- Extract the driver package -> Double-click to open the SR9900_v1.x.pkg file -> Follow the prompts to click next and install. (The package includes a detailed PDF guide for driver installation)
- After installation, if the network card does not work properly, you can open the terminal and use the following commands to re-enable the network card.

```
sudo ifconfig en10 down  
sudo ifconfig en10 up
```

Other



Object Detection using M5Stack UnitV2 and Edge Impulse

Using M5Stack's latest Linux AI smart camera UnitV2 to build a simulated industrial application scenario for defective product screening.

Video

UnitV2 Built-in Functions Unboxing and Usage

[UnitV2_video_en.mp4](#)

UnitV2 Application Scenarios

[UnitV2_video_release.mp4](#)

Product Comparison

Specificati on	UNIT-V2	UNIT-V2 M12	UNIT-V2 USB
Lens Included	Standard focal length (FOV 68°)	Standard focal length (FOV 85°) + Wide-angle focal length (FOV:150°)	No lens included, USB-A universal interface, compatible with various UVC cameras
CMOS	GC2145	GC2053	/

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