

Introduction

The HUSKYLENS 2 WiFi Module is a wireless expansion accessory designed for the HUSKYLENS 2 AI Vision Sensor. It adopts the Wi-Fi 6 standard, providing a stable and efficient 2.4 GHz wireless connection. With a simple plug-in installation, the module upgrades an existing wired vision system into a complete wireless AIoT solution. It supports core features such as MCP server functionality, wireless image transmission, and remote model downloading. In addition, it can transmit visual recognition results in real time over WiFi to large language models or various main controllers. This makes it ideal for applications that require wireless visual recognition, including AI education, maker projects, and intelligent robotics, unlocking more advanced AI and IoT capabilities for HUSKYLENS 2.

Technical Specifications

WiFi Standard: Wi-Fi 6

Wireless Frequency: 2.4 GHz

Maximum Data Rate: 286.8 Mbps

Bandwidth: 20 / 40 MHz

Encryption Protocols: WEP / WPA / WPA2 / WPA3

Interface Type: USB

Instructions for Use

The module can be installed in HUSKYLENS 2 or other devices that support USB network adapters. The following instructions describe installation and use with HUSKYLENS 2 only:

Remove the four screws at the corners on one side of the HUSKYLENS 2 housing.

Separate the metal housing from the PCB. The thermal pad between them is slightly adhesive, so some force may be required.

Insert the WiFi module into the slot and ensure it is firmly seated. When properly installed, the outer edge of the WiFi module should be nearly flush with the raised structure on the housing.

- **End Product Labelling Compliance Information**

When the module is installed in the host device, the FCC ID label must be visible through a window on the final device or it must be visible when an access panel, door or cover is easily removed. If not, a second label must be placed on the outside of the final device that contains the following text: "Contains FCC ID: 2AIDM-DF-TEL0191". The FCC ID can be used only when all FCC compliance requirements are met.

- **Information on Test Modes and Additional Testing Requirements**

This transmitter is tested in a standalone mobile RF exposure condition and any co-located or simultaneous transmission with other transmitter(s) class II permissive change re-evaluation or new FCC authorization. Host manufacturer installed this modular with single modular approval should perform the test of radiated emission and spurious emission according to FCC part 15C, 15.209, 15.207 requirement, only if the test result comply with FCC part 15C, 15.209, 15.207 requirement, then the host can be sold legally.

- **Additional testing, Part 15 Subpart B Disclaimer**

This transmitter modular is tested as a subsystem and its certification does not cover the FCC Part 15 Subpart B rules requirement applicable to the final host. The final host will still need to be reassessed for compliance to this portion of rules requirements if applicable. As long as all conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this modular installed.

- **Manual Information to The End User**

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The host integrator must follow the integration instructions provided in this document and ensure that the composite system end product complies with the requirements by a technical assessment or evaluation to the rules and to KDB Publication 996369. The host integrator installing this module into their product must ensure that the final composite product complies with the requirements by a technical assessment or evaluation to the rules, including the transmitter operation and should refer to guidance in KDB Publication 996369. OEM/Host Manufacturer Responsibilities OEM/Host manufacturers are ultimately responsible for the compliance of the Host and Module. The final product must be reassessed against all the essential requirements of the FCC rule such as FCC Part 15 Subpart B before it can be placed on the US market. This includes reassessing the transmitter module for compliance with the Radio and RF Exposure essential requirements of the FCC rules.

- **How to Make Changes - Important Note**

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization

FCC Caution:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.