

MV-AIBOX26

Series AI Vision Controller



Introduction

MV-AIBOX26 vision controller adopts Intel® 12th processor and has DDR5 memory. It supports 32-channel GPIO and multiple-channel light source control. It also has multiple interfaces like GigE, USB 2.0, and USB 3.0. The vision controller provides solutions for vision applications, and is widely applicable to multi-camera localization, detection, and recognition, etc.

Key Feature

- Adopts 12th generation Intel® CPU to offer strong performance.
- Provides PCIe expansion slot to connect to image frame grabber or graphics card.
- Supports 32-channel GPIO and some models support NPN/PNP switching for output.
- Adopts GigE interfaces for stable data transmission.
- Supports multiple-channel light source for synchronous control.

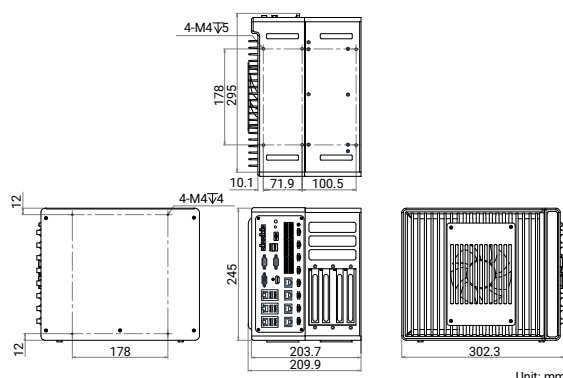
Available Model

- MV-AIBOX26
(AI Vision Controller, 12th-I7, 32GB+256G SSD+2Tb HDD, Supported PCIe, Lighting controller expansion module)

Applicable Industry

Consumer electronics, food and pharmaceutical, new energy, etc.

Dimension



Specification

HIKROBOT

Model	
Performance	
CPU	Intel® Core™ i7-12700
Memory	32 GB
Storage	256 GB SSD and 2T HDD
GPU	Intel® UHD Graphics 770
Operating system	Unactivated Windows 10
Chip	Q670
Interface	
Video output	HDMI interface × 1, VGA interface × 1 Supports independent display output at the same time Max. resolution 1920 × 1080 @ 60 Hz
Digital I/O	Opto-isolated input × 8 Opto-isolated output × 12 (supports NPN/PNP switching), digital-isolated low-side driver output × 8 Non-isolated bi-directional differential I/O × 4
Network interface	GigE interface × 7, including interface for PoE × 4
USB interface	USB 2.0 × 4, USB 3.0 × 4, built-in USB 2.0 × 1
Serial port	RS-232 × 2 by default, supports switching to RS-485 and RS-422
Light interface	24 VDC constant voltage × 8 (Max. power consumption of single channel is 72 W, total max. power consumption 190 W)
Extended interface	SATA 3.0 interface × 2, M.2 NVME interface × 1 PCIe × 16 extended interface × 1, PCIe × 8 extended interface × 1, PCIe × 4 extended interface × 2 (When the PCIe × 8 extended interface is used, the PCIe × 16 will only provide half of the bandwidth.)
Electrical feature	
Power supply	24 VDC (4-pin interface for system power supply) 24 VDC (2-pin interface for graphics card power supply)
Power consumption	Typ. 384 W (4-pin interface for system power supply) Typ. 228 W (2-pin interface for graphics card power supply)
Mechanical	
Dimension	302.3 mm × 248 mm × 210 mm (11.9" × 9.8" × 8.3")
Weight	Approx. 7.5 kg (16.5 lb.)
Temperature	Graphics card used: 0 °C to 45 °C (32 °F to 113 °F) Graphics card not used: 0 °C to 50 °C (32 °F to 122 °F)
Humidity	20% RH to 95% RH (no condensation)
General	
Certification	CE, KC