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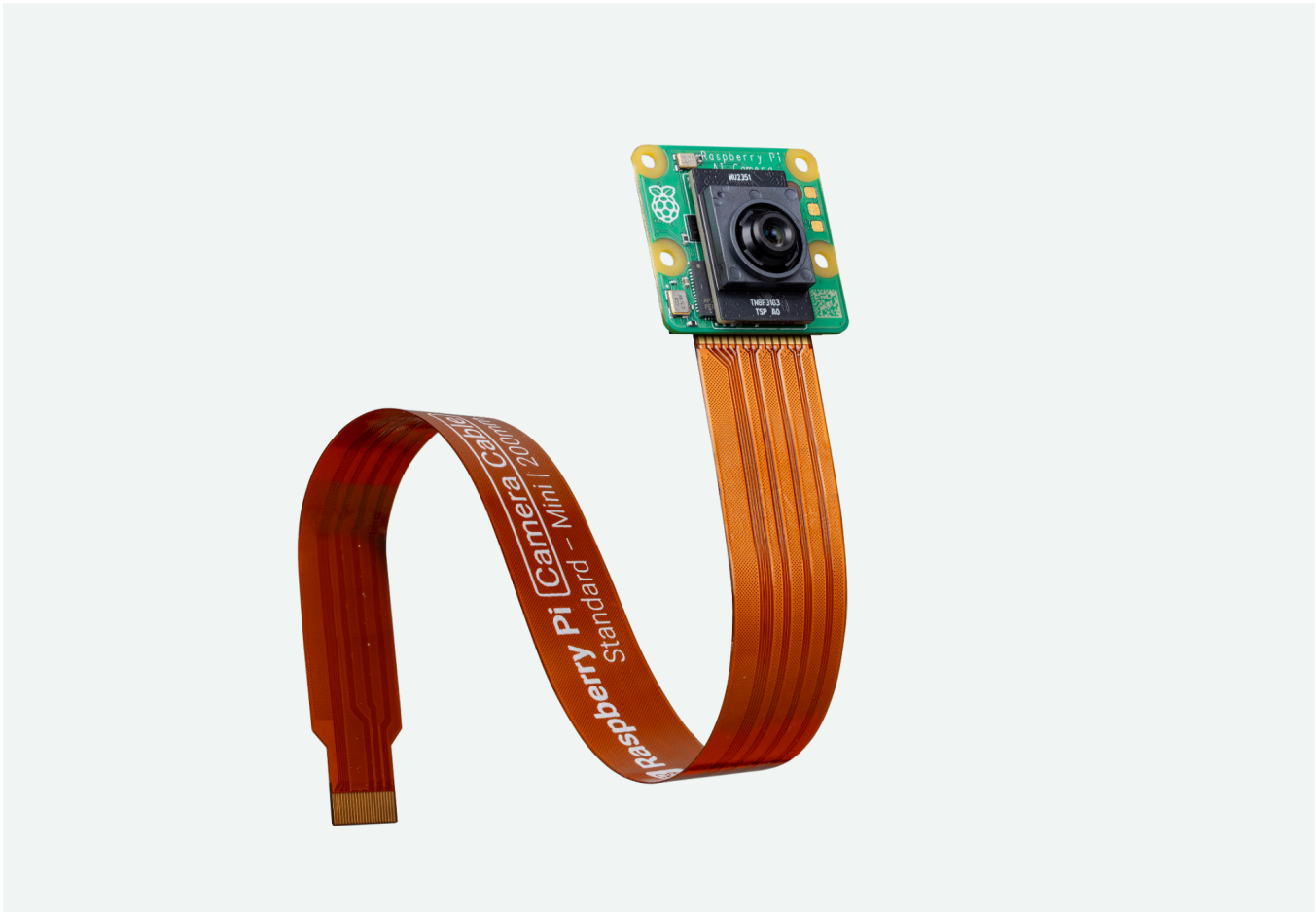
Raspberry Pi AI Camera

The Raspberry Pi AI Camera is a compact, powerful module featuring a 12MP Sony IMX500 sensor with on-board AI acceleration, enabling users to develop sophisticated vision-based applications without a separate accelerator.

SKU	UPDATED	PRICE
102111006	2026-11-21 06:09:37	$70.00(Excl. VAT)



Overview



The Raspberry Pi AI Camera is a compact, powerful module featuring a 12MP Sony IMX500 sensor with on-board AI acceleration, enabling users to develop sophisticated vision-based applications without a separate accelerator.

Key Features

01 3 MP Sony IMX500 Intelligent Vision Sensor

02 Integrated on-board inferencing acceleration for common neural network models, enabling complex vision AI applications without additional accelerators

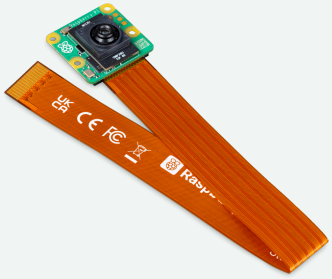
03 Tightly integrated with the Raspberry Pi camera software stack, allowing users to easily deploy their own neural network models

04 Support for tensor metadata in the libcamera and Picamera2 libraries, and in the rpicam-apps application suite, making it easy for beginners to use while offering advanced users unparalleled power and flexibility

05 Integrated RP2040 for neural network firmware management

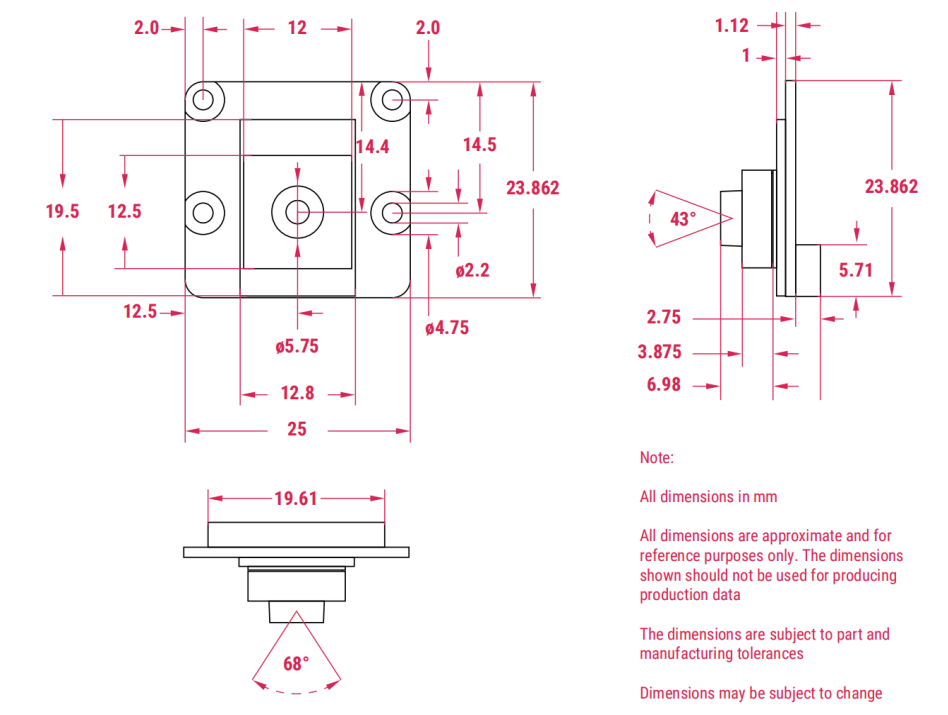
06 Works with all Raspberry Pi models, using the standard camera connector cable

Product Gallery





Hardware Overview



Applications

- **Intruder Detection**
- **Electronics learn based on Grove Starter Kit for Raspberry Pi Pico**
- **Home facilities control connect with other wireless microcontrollers**
- **Machine Learning Application**
- **IoT Application**

Resource Links

- https://www.seeedstudio.com/Raspberry-Pi-AI-Camera-p-5939.html
- Raspberry Pi AI Camera product brief
- Getting started with Raspberry Pi AI Camera
- GitHub - raspberrypi/imx500-models: Raspberry Pi AI Camera (IMX500) Model Zoo
- Raspberry Pi AI Camera | Sony Semiconductor Solutions Group
- IMX500 Packager | Sony Semiconductor Solutions Group
- IMX500 Converter | Sony Semiconductor Solutions Group
- Raspberry Pi AI Camera Launch Blog Post
- Libcamera
- GitHub - raspberrypi/picamera2: New libcamera based python library
- Rrpicam-apps

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