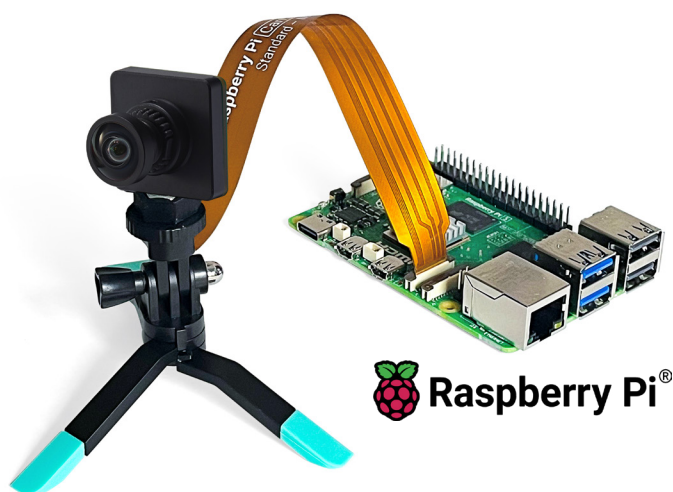


HIGH-PERFORMANCE EVENT-BASED VISION STARTER KIT FOR RASPBERRY Pi 5



STARTER KIT GENX320 FOR RASPBERRY Pi 5



** Raspberry Pi 5 board needs to be purchased separately.*

SENSOR	
Sensor	Prophesee GENX320
Resolution	320 x 320 px
Event Rate	~10,000 fps equivalent
Latency	<150 μ s at 1,000 lux, <1,000 μ s at 5 lux
Dynamic Range	>140 dB
Power Consumption	<50 mW (sensor only)
Interface	MIPI CSI-2 (D-PHY)

CAMERA	
Lens Mount	Interchangeable M12 S-Mount lens holder
Focal length	1.8
Diagonal field of view	76°
Horizontal field of view	58°
Vertical field of view	58°
Focal ratio (f-stop)	f/2.8 Fixed Iris
IR cut filter	No

FEATURES

- Interchangeable M12 S-mount lens holder
- Complete lensed event based camera board
- 20 cm flex cable MIPI Raspberry Pi compatible output
- Raspberry Pi 5: sold separately at: [raspberrypi.com](https://www.raspberrypi.com)

SOFTWARE

- V4L2 Driver
- Open EB: C++/ Python APIs
<https://github.com/prophesee-ai/openeb>
- Visualization
- Sensor settings (biases), ROI, ERC

COMPATIBLE WITH METAVISION® SDK5 PRO (OPTION AVAILABLE FOR PURCHASE)

Source code access including:

- Real-time object tracking
- Vibration detection
- Optical flow
- Active marker detection and tracking

Learn more: prophesee.ai/SDK5Pro

PROPHESSEE STARTER KIT - GENX320 - M12 S-MOUNT - RASPBERRY Pi 5

APPLICATIONS

This kit enables untethered, high-speed, low-latency event data collection on embedded platforms, serving as the foundation for developing advanced event-based applications:



DRONES:

- Detection and tracking
- Obstacle avoidance
- Real-time SLAM
- GPS-denied navigation

INDUSTRIAL & IoT:

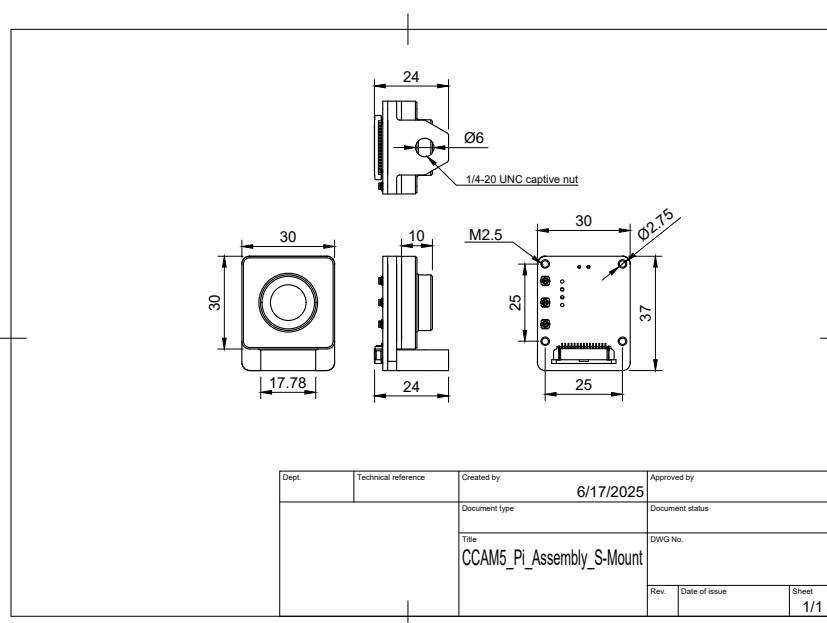
- Vibration monitoring
- Spatter tracking
- High speed defect detection

SURVEILLANCE:

- Fall Detection
- Intrusion Monitoring

...and many others.

PHYSICAL SPECIFICATIONS



DESCRIPTION

The STARTER KIT GENX320 for Raspberry Pi 5 is a compact and powerful embedded vision development platform designed to unleash the capabilities of event-based sensing on the Raspberry Pi 5. Built around Prophesee's GENX320, the world's smallest and most power-efficient event-based vision sensor, this kit enables the development of real-time, ultra-low latency applications for robotics, drones, industrial automation, and more. It provides a streamlined path to rapidly develop, test, and prototype custom applications, making it an ideal solution for engineers and researchers looking to harness the benefits of neuromorphic vision.

RASPBERRY Pi 5: HOST PLATFORM REQUIREMENT

Recommended SKUs/Accessories for best performance:

PI5 MODEL B/8GB: <https://www.raspberrypi.com/products/raspberry-pi-5/?variant=raspberry-pi-5-8gb>

SC1148: <https://www.raspberrypi.com/products/active-cooler/>

SC1153: <https://www.raspberrypi.com/products/27w-power-supply/>

SC1675: <https://www.raspberrypi.com/products/ssd-kit/>

ORDERING CODES

PSKX320MPRPI5 - STARTER KIT - GENX320MP-COB RPI 5

<https://www.prophesee.ai/event-based-metavision-raspberrypi5-genx320-starter-kit/>

© 2025 Prophesee SA. All rights reserved. PROPHESSEE, the PROPHESSEE logo and METAVISION are trademarks of Prophesee SA, registered in the U.S. and other countries and regions. Raspberry Pi and the Raspberry Pi logo are trademarks of Raspberry Pi Ltd. Other product and company names mentioned herein may be trademarks of their respective companies.