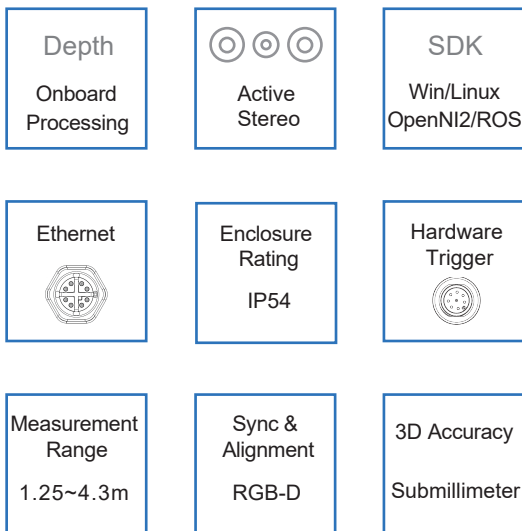


Percipio Industrial 3D Camera

PM806-E1



Overview

Percipio's 3D smart camera uses innovative active stereo vision technology with core patents to obtain more depth details and more robust environmental adaptability than traditional binocular vision.

PM806-E1 combines the structured light with the mature RGB sensor technology to provide real-time RGB and depth images.

With reliable measurement results and the carbon-fiber body, PM806-E1 is an ideal solution for robotics, logistics, inspection and other applications.

Advantages

PM806-E1 includes two infrared (IR) sensors, one RGB sensor and several structured-light projectors. Comparing to traditional binocular cameras, PM806-E1 provides:

- + More depth details
- + More robust to ambient light interference

Industrial Sensor

PM806-E1 is splash, water, and dust resistant and has been tested under controlled laboratory conditions with a rating of IP54 under IEC standard 60529.

Trigger Mode

PM806-E1 supports the software trigger and hardware trigger. The customers can synchronize multi-cameras to capture images with the hardware trigger.

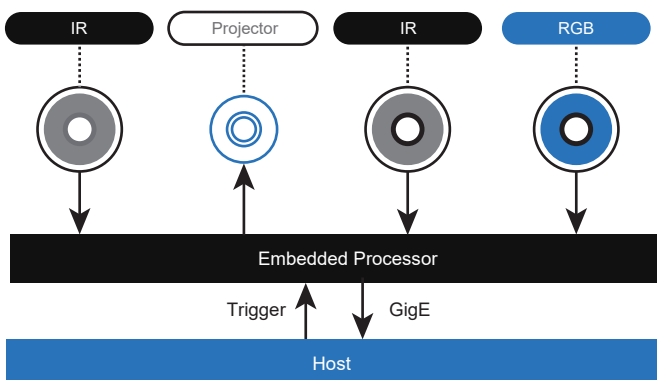
High Accuracy

With the innovative multi-laser projecting system, PM806-E1 provides high measurement accuracy in its large working range and wide FOV.

Note:

All cameras have been calibrated with intrinsic parameters before delivery. If you need to calibrate multiple cameras with extrinsic parameters, please contact Percipio technical support.

Principle



Structured-light Projector

Project the structured light to objects for assisting the active stereo system to calculate depth data.

Infrared Sensor

Receive the structured light reflected from the objects surface.

RGB Sensor

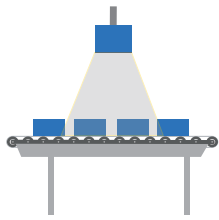
Capture RGB images.

Embedded Processor

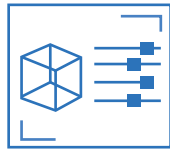
Process infrared and RGB images:

- Calculate depth data and achieve alignment and synchronization with RGB images.
- Upload data through Gigabit Ethernet (GigE).
- Receive trigger signal from the host or the hardware trigger source.

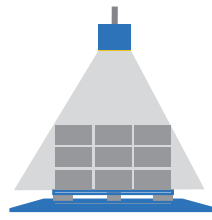
Applications



Integrity Check



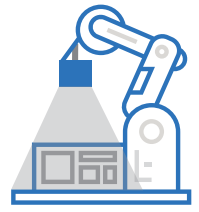
3D Content Generation



Palletizing / De-palletizing



Volume Measurement



Industrial Sorting

Features

Dimension&Weight

L x H x W	538.4 mm × 85.5 mm × 89.6 mm
Weight	2.2 kg

Measurement

Measurement Range (mm)	1250 ~ 4300
FOV (H/V)	64°/49°
Z Accuracy (mm)	2.76mm@2500mm
X/Y Accuracy (mm)	5.72mm@2500mm

Software

OS	Linux/Windows/Android/ROS
Development Platform	Percipio Camport SDK
API	C/C++, C#, Python, Java

Performance

Depth	1 fps @ 1280×960
	1 fps @ 640×480
	1 fps @ 320×240

RGB-D Sync&Alignment

Output Data Point cloud, depth, infrared and RGB images

Interface

Power&Trigger	8-pin aviation plug
Ethernet	M12 X-Coding

Electronics

Supply Voltage	DC 24 V 3A;
	IEEE802.3at POE
Power (Idle Mode)	6.0 W
Power (Continuous Mode)	16.0 W
Power (Trigger Mode)	14.0 W

Ambient Data

Operating Temperature	0°C ~ 45°C
Storage Temperature	-10°C ~ 55°C
Enclosure Rating	IP54

Note:

The specs and dimension may change without notice.



For purchase or business cooperation, please email us:

For technical support, please email us:

For more information about Percipio 3D cameras, please visit :

For online documentation, please visit :

info@percipio.xyz

support@percipio.xyz

www.percipio.xyz

doc.percipio.xyz/cam/latest/