

EasyGauge

Sub-pixel measurement & dimension control library



At a Glance

- Sub-pixel point location and edge fitting
- Highly accurate and robust
- Advanced and automatic calibration
- Multiple gauge models
- Measurement of position, orientation, size, curvature, distance
- Interaction through graphical interface

Benefits

Open eVision Studio: Evaluation, prototyping and development tool

Open eVision Studio is the evaluation, prototyping and development tool of Open eVision. Its intuitive graphical user interface allows you to call and immediately see the result of any of eVision's 2D image processing functions. A scripting functionality generates the corresponding code, which can then be copied and pasted into your application.

Open eVision Studio is free (when using Open eVision 2.0 and above) and does not require any license.

Just click on DOWNLOAD OPEN EVISION STUDIO and install Open eVision. Sample images, manuals and sample programs are included.

EasyGauge Description

EasyGauge is a cutting-edge measurement and dimension control library for use in gauging and metrology applications. By relying on proven sub-pixel edge detection and shape fitting algorithms, it allows determining the dimension, position, curvature, size, angle or diameter of manufactured parts with an excellent accuracy.

Robustness is ensured by powerful edge-point selection mechanisms that are intuitive and easy to tune, allowing measurement in cluttered images.

In addition, EasyGauge also supports the automatic measurement of parallel sides, thus providing means of measuring the thickness of flat or bent objects, as well as the precise location of corners.

Advanced and Automatic Calibration

EasyGauge features advanced built-in calibration capabilities to transparently convert pixel measurements to physical units; this relieves the user of the need to convert coordinates. Non-square pixels and rotated coordinate axis are supported. EasyGauge also provides means to determine and correct perspective and optical distortion, with no performance loss.

Gauge Grouping

EasyGauge supports grouping of the measurement gauges and lets these groups track the measured items in the image. These can freely translate and/or rotate while the probes are repositioned accordingly. Derived measurements such as distances between feature points can then be computed.

Neo Licensing System

- Neo is the new Licensing System of Euresys. It is reliable, state-of-the-art, and is now available to store Open eVision and eGrabber licenses.
- Neo allows you to choose where to activate your licenses, either on a Neo Dongle or in a Neo Software Container. You buy a license, you decide later.
- Neo Dongles offer a sturdy hardware and provide the flexibility to be transferred from a computer to another.
- Neo Software Containers do not need any dedicated hardware, and instead are linked to the computer on which they have been activated.
- Neo ships with its own, dedicated, Neo License Manager, which comes in two flavours: an intuitive, easy to use, Graphical User Interface and a Command Line Interface that allows for easy automation of Neo licensing procedures.

All Open eVision libraries are available for Windows and Linux

- Windows 7 to Windows 10, x86 (32 bits) and x86-64 (64 bits)
- Linux x86-64 (64 bits) with a glibc version 2.18 or newer

Applications

Machine Vision for the Electronic Manufacturing Industry

- Lead inspection
- LED inspection

Machine Vision for the General Manufacturing Industries

- Checking dimensional accuracy
- Assembly inspection

Specifications

Software

Host PC Operating System	 Open eVision is a set of 32-bit and 64-bit libraries that require a processor compatible with the SSE4 instruction set.
	• The Deep Learning Bundle is only available in the 64-bit Open eVision library.
	 Open eVision can be used on the following operating systems:
	 Windows 10 (32- and 64-bits)
	 Windows 8 (32- and 64-bits)
	 Windows 7 (32- and 64-bits)
	 Linux 64 bits (x86-64 only) with a glibc version greater or equal to 2.18
	 Since Open eVision 2.6, discontinued support of:
	 Windows Vista 32-bits Service Pack 1
	 Windows XP 32-bits Service Pack 3
	 Windows Embedded Standard 2009 32-bits
	Remote connections
	 Remote connections are allowed using remote desktop, TeamViewer or any other similar software.
	Virtual machines
	 Linux virtual machines are supported. Microsoft Hyper-V and Oracle VirtualBox hypervisors have been successfully tested.
	 Windows virtual machines are not supported.
	Minimum requirements:
	- RAM: 8 GB
	 Display size: 800 x 600. 1280 x 1024 recommended.
	 Color depth: 16 bits. 32 bits recommended.
	 Between 100 MB and 2 GB free hard disk space for libraries, depending on selected options.
APIs	 Supported Integrated Development Environments and Programming Languages:
	 Microsoft Visual Studio 2008 SP1 (C++, C#, VB .NET, C++/CLI)
	 Microsoft Visual Studio 2010 (C++, C#, VB .NET, C++/CLI)
	 Microsoft Visual Studio 2012 (C++, C#, VB .NET, C++/CLI)
	 Microsoft Visual Studio 2013 (C++, C#, VB .NET, C++/CLI)
	 Microsoft Visual Studio 2015 (C++, C#, VB .NET, C++/CLI)
	 Microsoft Visual Studio 2017 (C++, C#, VB .NET, C++/CLI)
	 Microsoft Visual Studio 2019 (C++, C#, VB .NET, C++/CLI)
	 QtCreator 4.15 with Qt 5.12
	 Since Open eVision 2.5.1, discontinued support of:
	 Borland C++ Builder 6.0 update 4 (C++)
	 CodeGear Delphi 2009 (Object Pascal)
	 CodeGear C++ Builder 2009 (C++)
	 Microsoft Visual Studio 6.0 SP6 (C++, Basic)
	- ActiveX API
	 Since Open eVision 2.4.1, discontinued support of:
	 Embarcadero RAD Studio XE4 and XE5 (C++, Object Pascal, 32 bits only)

Ordering Information

Product code - Description	• 4009 - EasyGauge for USB dongle
	 4059 - EasyGauge for PAR dongle
	 4109 - EasyGauge for board licensing
	 4159 - Open EasyGauge for USB dongle
	• 4209 - Open EasyGauge for PAR dongle
	 4259 - Open EasyGauge for soft-based licensing
	• 4309 - Open eVision EasyGauge
Optional accessories	 6512 - eVision/Open eVision USB Dongle (empty)
	 6513 - eVision/Open eVision Parallel Dongle (empty)
	• 6514 - Neo USB Dongle (empty)



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