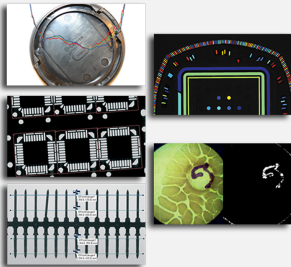


# Inspection Bundle

Bundle of Open eVision inspection libraries



## At a Glance

- Cost effective bundle of eVision's inspection libraries
- Includes EasyImage, EasyGauge, EasyMatch, EasyObject and EasyColor

## 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.

### EasyImage Description

- EasyImage includes operations usually performed as pre-processing steps to improve the image quality and obtain a good contrast between the background and the objects to be inspected.
- EasyImage supports gray-level and color images. Selected morphology functions are also optimized for binary (1-bit per pixel) and bi-level images.
- EasyImage includes numerous image processing functions, such as enhancement and restoration by linear or non-linear filtering, arithmetic and logic operations, geometric transformations for image registration, histogram analysis for thresholding, projection, ...

### Flexible Masks

- Flexible Masks provide a powerful way of restricting the processing to freely selected parts of the image.
- They are supported by selected image analysis functions.

### 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.

## EasyObject Description

The EasyObject library handles image segmentation, i.e. the decomposition of images into separate objects, also called blobs.

Once the objects have been constructed, they can be handled as independent entities. Various geometric parameters or features, such as area, width, or ellipse of inertia, can be computed for each object.

Objects of interest can be selected by means of their position or of their computed features.

EasyObject also supports the inspection of holes in defined objects. Holes are managed as the objects themselves, benefiting from the same geometrical features. EasyObject manages the relationship between objects and holes, defining parent objects for holes.

## EasyColor Description

EasyColor includes a set of optimized color systems transformation functions and color analysis functions.

The color systems supported are RGB, XYZ, L\*a\*b\*, L\*u\*v\*, YUV, YIQ, ISH, LSH, VSH, LCH and YSH.

EasyColor provides efficient means to convert images between these systems and to transform color images into gray level images and vice versa.

## EasyMatch Description

EasyMatch is a gray-level and color pattern matching library. It lets you train the system on a reference pattern and afterwards locate its occurrences in other images.

This tool is very convenient when the position of a given part is unknown in the field of view, or if the presence of parts must be controlled. The library works by using normalized correlation method, i.e. measuring discrepancies between the pattern and the target image.

## 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

# Specifications

## Software

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### 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.

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### 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)
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## Ordering Information

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### Product code - Description

- 4014 - Inspection Bundle for USB dongle
  - 4064 - Inspection Bundle for PAR dongle
  - 4114 - Inspection Bundle for board licensing
  - 4164 - Open Inspection Bundle for USB dongle
  - 4214 - Open Inspection Bundle for PAR dongle
  - 4264 - Open Inspect Bundle for soft-based licensing
  - 4314 - Open eVision Inspection Bundle
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### 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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