

Applications:

- Manufacturing lines (Industry)
- · Optical inspection
- Motion analysis
- Sports
- Life Science
- Defense
- Troubleshooting

Key Features:

- Full control and configuration of the parameters of cameras and frame grabbers
- Image capture and calibration
- · Cross functionality for all KAYA products
- Acquisition and playback of video streams from PC RAM
- Windows 7/10 and Linux OS support
- 32/64bit OS Support
- Direct GPU / Direct GMA Support
- ANSI C SDK
- Python binding
- .NET support
- Matab/Labview/Halcon/GenTL support
- Support of configuration of cameras using GenAPI
- Support of configuration of frame grabbers using GenAPI
- Direct physical address DMA support
- Cyclic and Queued buffer modes
- Up to 40Gbps direct SSD recording

VisionPoint Software & SDK

VisionPoint is the leading cutting-edge and user friendly software environment for cameras and frame grabbers control and configuration, as well as video acquisition, recording and playback. You can gain the benefits of this comprehensive and easy-to-use software, no matter which camera you use with any frame grabbers manufactured by KAYA Instruments.

You can accelerate your vision solutions with the VisionPoint application, which includes GUI, SDK and API that are followed by rich set of documentation, examples and reference designs.

VisionPoint natively integrated with most of the modern Machine Vision standard tools, which are used worldwide, such as MVTec Halcon, Matlab, Labview etc.

Both Windows and Linux users can experience this powerful and reliable software package, including a concise and intuitive GUI. The API has a very distinct and extensive documentation giving the user the ability to quickly understand and take advantage of its broad options.

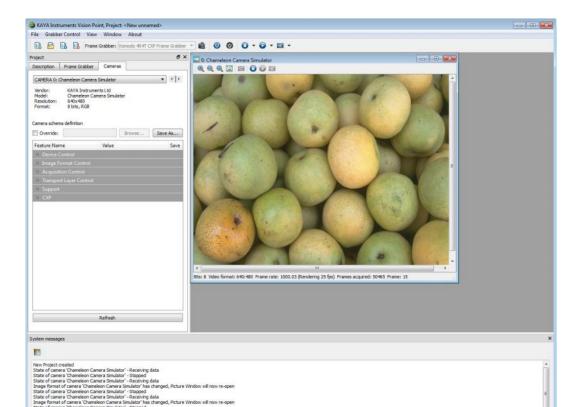
The digital Video recorder capabilities of the Vision Point software package, achieves industry highest performance of up to 40Gbps recording of uncompressed digital streams for long periods of time and in line compression allows even higher recording times.



VisionPoint GUI

Key Features:

- Interactive Interfacing to various cameras
- Interactive Live view of video
 streams
- Conversion between video stream standards
- Interactive Configuration of camera parameters
- Interactive Configuration of Frame Grabber parameters
- Recording and Playback of video streams to PC DRAM
- Analyzing captured images
- Saving captured pictures and sequences to file
- Saving Frame Grabber and camera configuration to file
- Loading Frame Grabber and camera configuration from file



VisionPoint GUI

The VisionPoint GUI has outstanding features. It supports multi-stream and provides multi-camera live rendering, camera initialization and controls. The frame grabber configuration is very easy with it. Doing recordings and replay cannot be simpler, than in the VisionPoint. The system calibration and debug tools are one of the most advanced parts of the software. Users can quickly save image sequences to a file. Besides the highly-efficient color pattern decoding, the trigger control and encoder control are available at all users' convenience. Large numbers of customers are already very satisfied with the VisionPoint GUI worldwide.

VisionPoint SDK & API

The VisionPoint SDK enables the developers to enrich the application with advanced and custom functionalities based on specific requirements.

The SDK provides essential features, such as Frame Grabber and Camera Genicam configuration and GenTL producer. There is a flexible buffer management system including cyclic buffers, queued buffers and direct GPU buffers. Users can experience exceptional features of the image processing, such as Bayer de-mosaicking, Color correction, flat field correction, Gain/Offset and many more. Furthermore the VisionPoint SDK offers other important features, for instance Video frames timestamping, video de-interlacing, camera trigger, GPIO control, built-in encoders and etc.

A high level API can be used with the Frame Grabbers by KAYA Instruments in the purpose of connecting, configuring and capturing a video stream of data from up to 8 channels with up to 8 video streams on each channel.

The API can be also used with the Chameleon Camera Simulator by KAYA Instruments so as to configure the camera simulation interface on the highest level. This simulator is capable of generating CoaXPress video streams and test patterns of up to 4 CoaXPress links at various speeds and topologies.

Compatibility

Supported vision standard



Supported operating systems



Supported vision libraries



Compatible with the most of the popular machine vision libraries.

KAYA Instrument strives to create and maintain compatibility and interfaces for the most common and advanced vision image processing libraries and applications. Major support is available for **MVTec Halcon, National Instruments LabVIEW** and **MathWorks MATLAB**. Please check our KAYA website for an upto-date list of other supported libraries and software package.

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http://www.kayainstruments.com/software-sdk/

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