



# LUMENERA CAMERA SDK

Lumenera's Software Developers Kit (SDK) provides you with a complete, comprehensive set of software tools to easily and quickly integrate our imaging solutions into your applications. With this SDK you have the ability to create a single application that can command, control and acquire images from any of our USB and GigE cameras. Learn the SDK for one camera model and you can integrate any of our other camera models quickly and easily, often with little or no new code required.

Rely on Lumenera's years of experience and reputation to help you build a solution that best meets your needs. At Lumenera we understand and appreciate a well designed and documented SDK, which is why we put so much effort into creating ours.

**Contact us to determine how you can benefit from Lumenera's high-quality reliable device drivers and products.**



## Extensive API

The LuCam API is central to the SDK and is comprised of a library of functions to control, query, and acquire image data from the camera. It also contains routines that handle support functions such as image manipulation, data processing and saving to disc. The library is powerful, yet easy to use and understand. Functionality includes:

- Connecting to Single or Multiple Cameras
- Querying and Setting Camera Properties Without Fear of Crashing Your Computer
- Previewing Video
- Configuring/Adjusting Video
- Acquiring Video Data
- Acquiring Single or Series of Snapshots
- Processing Images
- Save Image to Disk
- Managing the Video Display Window
- Custom Color Correction Matrix
- Custom Look-Up-Tables (LUTs)
- Callback Functions (user function called for each frame of video)
- Multiple Camera, Simultaneous Image Capture
- General Purpose I/O control (lighting, triggering, etc.)
- Reading/Writing Non-Volatile Camera Memory
- Image Processing Library Functions

## Sample Source Code

Included with the purchase of your SDK are 40+ source code samples that simplify your engineering effort, decrease time-to-market and reduce development costs. Each sample is a stand-alone application that demonstrates some aspect of camera control, image acquisition or other feature of the API. Use them as the basis for a new application or simply cut and paste the desired functionality into your existing application.

## Multi-Camera & Platform Support

Designing your application for multiple camera support is simple. The SDK is designed to allow a single application to simultaneously handle multiple cameras regardless of model or interface mix.

## Flexibility – Multiple Programming Languages

Lumenera's flexible SDK allows you to select the programming interface that you are most familiar with including:

- C/C++, C# and Visual Basic
- DirectX, GigE, Vision, TWAIN, GenICam (coming soon), MATLAB and LabVIEW
- Compatible with Windows 8, 7, XP, VISTA, and Mac, 32 or 64-bit
- .NET Framework compliant for simplified programming
- Complete framework with routine libraries for common features



7 Capella Court  
Ottawa, ON, K2E 8A7  
info@lumenera.com

## Lumenera Linux SDK

The Lumenera Linux SDK fully supports all of Lumenera's high-performance USB 3.0 cameras using the popular Ubuntu Linux operating system with powerful features and reliable performance.

Lumenera has unofficial support for other Lumenera USB 2.0 cameras and variants of other Linux operating systems and platforms. Please speak with a Lumenera sales representative to understand how we can meet your requirements for Linux integration with our cameras.



## Superior Technical Support and Documentation

Receive answers to the most challenging issues within days not weeks. At no additional cost, receive unlimited access to our world class Technical Assistance Centre that is always quick to respond. Avoid the typical struggles encountered with other camera SDKs through our extensive support and documentation, including:

- API Reference Manual listing LuCam API features and functions
- 40+ Technical Briefs detailing unique camera features and how they fit your application
- 200+ technical topics in the Online Knowledge Base providing immediate answers to common development issues
- 40+ Sample Source Code for Stand-Alone Applications showcasing various camera and API features

We will personally assist you with your Lumenera camera development or imaging questions. Lumenera is also available to write software functions for your specific requirements, saving you time and money. Rely on us to help you talk to the cameras and call functions.

Our team is committed to fully supporting your vision needs through product design, development, integration, deployment and post-sales support. Expect our trained professionals to work closely with your Project Managers and Engineering Teams to better meet your application requirements, and to assist with integration of our standard and customized imaging solutions.

Contact us at:  
[info@lumenera.com](mailto:info@lumenera.com)

[www.lumenera.com](http://www.lumenera.com)

© 2015 LUMENERA CORPORATION, ALL RIGHTS RESERVED. DESIGN, FEATURES, AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

#15-CORP-01