

GenICam™ 2.2 Standard Released Support for Mac OS X and Camera Link



Released in 2006, the goal of the [GenICam standard](#) is to provide a generic programming interface for all kinds of cameras. No matter what interface technology (GigE Vision, Camera Link, IEEE 1394, USB, etc.) is being used or what features are implemented, the application programming interface (API) should be always the same. This approach makes it easy to connect cameras compliant with the GenICam standard without the need for camera-specific configurations.

New Mac OS X Support

The GenICam standard now provides support for all major operating systems including: Windows, Linux, and Mac OS X. With GenICam being used more widely, the committee felt it was time to adopt it under Mac OS X.

Dr. Friedrich Dierks, chair of the GenICam committee and Head of Software Development at Basler comments: "I think this will open the door for an entirely new segment of GenICam users. One example could be academic researchers. Macs are used frequently in the scientific community, and we think that we can better support them by offering a generic interface for the cameras and camera-related products they use."

New Camera Link Support

GenICam 2.2 now also brings the powerful GenAPI to Camera Link. The GenICam Standard Features Naming Convention was enhanced to cover Camera Link, so Camera Link and GigE cameras now have a very large feature set in common. This actually moves Camera Link cameras near to "plug and play", just like cameras with other interfaces such as Gigabit Ethernet. In addition, GenICam allows the use of legacy cameras thanks to the CLProtocol specification defining a common interface for Camera Link protocol driver DLLs (dynamic link libraries).

Perfect Example – Basler aviator Cameras and the pylon Driver Package



[Basler aviator](#) Camera Link cameras were some of the first to work with GenICam, even before this official release. The aviator series is available with either a GigE or a Camera Link interface, and the Camera Link models offer both the "classic" register-based type of interface commonly used with Camera Link cameras and a C/C++ high level programming API based on Basler's pylon platform.

The [Basler pylon driver and SDK package](#) supports a more modern programming style and easier integration into software programs. It can be used with Basler cameras and [can be downloaded for free](#) from Basler's web page.

About GenICam

The GenICam standard is hosted by the [European Machine Vision Association \(EMVA\)](#). More than 90 companies from all over the world are now part of this initiative.

GenICam consists of four modules:

- GenAPI – an XML description file format defining how to access and control a camera device in a standard way
- The GenICam Standard Features Naming Convention (SFNC) - common naming convention for camera features, which promotes interoperability between products from different manufacturers
- GenTL – a generic Transport Layer Interface between software drivers and libraries that transports the image data from the camera to the application running on a PC
- CLProtocol – a specification for the interfaces of a platform dependent dynamic link library (CLProtocol DLL) used to convert a vendor-specific Camera Link serial protocol interface to a GenAPI interface

For more information, please visit www.genicam.org.