

# Vision Acquisition Driver Software

## NI Vision Acquisition

- Comprehensive high-level driver software for all NI vision hardware
- Works with thousands of cameras
- Interactive camera configuration utility
- Full frame-rate display with overlays
- Single-shot or continuous acquisitions
- Low-level interface control, triggering, memory locking, and buffer copying
- BMP, PNG, TIFF, JPG, or AVI file saving formats

### Operating Systems

- Windows 2000/XP
- LabVIEW Real-Time

### Recommended Software

- LabVIEW
- LabWindows/CVI
- Visual Basic
- C/C++

### Included with

- Vision Development Module
- Vision Builder for Automated Inspection
- All NI vision hardware



## Overview

National Instruments Vision Acquisition software is a complete, powerful application programming interface for image acquisition, display, and storage. NI Vision Acquisition software is included with the Vision Development Module, Vision Builder AI, and every NI frame grabber. It is sold separately for security and monitoring applications that do not require image processing or any NI hardware. As opposed to camera-specific software, most applications written with Vision Acquisition stay the same even when you change cameras.

Vision Acquisition works with thousands of different cameras including analog, Camera Link, IEEE 1394, GigE Vision, and parallel digital. For a complete list of applicable cameras, visit [ni.com/camera](http://ni.com/camera).

## Quick-and-Easy Camera Configuration

Configure video capture easily with NI Measurement & Automation Explorer (MAX), an interactive camera configuration utility included with Vision Acquisition software. Simply select your camera type or model from MAX, and your system will be configured to work with your camera.

Vision Acquisition and MAX save you development time by importing these settings into your development environment. You can also use MAX to acquire images and save them to disk. In addition, you can display histograms to verify your image contrast, dynamic range, and lighting conditions.

## Camera Link Image Acquisition



Camera Link is a high-speed camera interface standard developed by leading camera and frame grabber companies, including

National Instruments. Because the cable and communication protocols are included in the standard, Camera Link makes it easy to connect cameras and frame grabbers. Camera Link also provides the most image acquisition bandwidth available today for high-speed or high-resolution images.

## IEEE 1394 Image Acquisition

Vision Acquisition works with both IEEE 1394a and IEEE 1394b cameras. IEEE 1394 provides the easiest method for connecting cameras to PCs. No frame grabber is required and the data and power use the same 6-pin cable. While not nearly as fast as Camera Link, data rates are acceptable for the vast majority of applications.

## Gigabit Ethernet Vision Image Acquisition

**GigE VISION**™ GigE Vision is a new interface standard for cameras that transmit images over Gigabit Ethernet. GigE Vision provides an alternative for vision applications requiring long cable distances or lower-cost cabling. While the cabling is simpler, a separate cable is required to supply power to the camera. Vision Acquisition software works with any Gigabit Ethernet controller, but is highly optimized for Intel Gigabit Ethernet controllers, such as the NI PCIe-8231.

## Ordering Information

NI Vision Acquisition .....778413-01

## BUY NOW!

For complete product specifications, pricing, and accessory information, call 866 265 9891 (U.S. only) or go to [ni.com/vision](http://ni.com/vision).