

## GEVA 400 Vision Controller



**GEVA 400**

### Benefits

- Multi-camera solution drives down system cost
- Power over Ethernet (PoE) for up to 4 GigE 2D cameras (expandable if not using PoE)
- Quad-core processor and system resources for demanding applications
- Choice of application software embedded to suit user need and experience
- Full complement of vision capabilities and factory communication options
- Small DIN mountable form factor with no moving parts

### Overview

## Multi Camera Vision Controller

GEVA 400 is an industrial controller that offers excellent performance for vision applications that need to inspect multiple features of a part or assembly. GEVA 400 provides Power-over-Ethernet (PoE) for up to four (4) Gigabit cameras.

Equipped with a low power, quad core processor and high-speed system resources, the GEVA 400 effectively manages multi-camera acquisition and processing. Each of the four Gigabit compliant camera ports internally connect through independent data lanes to alleviate bandwidth bottlenecks often associated with multi-camera acquisition. Each network camera port can be expanded using external Ethernet switches to accommodate larger non-PoE camera configurations. The GEVA 400 camera ports are compatible with a wide range of high and low resolution, mono or color area scan GigE cameras.

GEVA 400 provides standard external interfaces for system integration, including VGA and HDMI display ports, 4 USB ports, 2 Gigabit Ethernet communication ports and an RS-232 serial port. Camera triggering, I/O and lighting control are supported using a companion breakout module. The DCI-101 and PL-USB modules provide an easy and safe way to connect factory I/O to the GEVA 400 and associated cameras.

Vision solutions on the GEVA 400 are setup using TELEDYNE DALSA's iNspec Express or Sherlock application software. The iNspec Express software is easy to use and requires little or no prior vision experience, while the Sherlock software offers greater flexibility to tackle more challenging inspection tasks. Both packages offer a full complement of tools, with interfacing and control options for both users and equipment. For performance migration, applications built on other TELEDYNE DALSA equipment with the same camera setup will also run on GEVA 400.

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## Specifications

- Storage: 256 GB SSD
- Program: 8 GB
- CPU: 1.8 GHz Quad Core
- OS: Windows 10 IoT
- Camera Ports: GigE x4
- Serial Communication: USB 2.0 (x2), USB 3.0 (x2), RS232
- I/O: 8 IN/12 OUT via PL-USB companion module
- Display: VGA & HDMI
- Power: 24V (60W)
- Temp: 0-50C Operating
- Cooling: Fanless via passive heatsink
- Size: 198 x 57 x 184 mm
- Mount: DIN rail
- Certifications: CE, FCC Class A, RoHS

## Application Software Choices

### iNspec Express

iNspec Express offers a simple point and click interface that allows users to rapidly setup and deploy vision solutions. iNspec's easy navigation and practical features appeal to both experienced and new users alike.



### Sherlock

Sherlock offers additional flexibility and advanced features for tackling challenging applications. Sherlock's programmability appeals to more experienced vision integrators, allowing mixing of camera technologies within the same application, advanced scripting and GUI customization.



### General

Both software products offer a full suite of vision tools and capabilities to satisfy a broad range of automated tasks.

### DCI-101 and PL-USB Modules

The DCI-101 is a breakout module that simplifies wiring between the GEVA 400 and 2 Genie Nano cameras. The module provides an isolation barrier for the cameras and provides a push-button manual trigger and status LEDs showing the state of camera inputs and outputs.

The PL-USB expands on the capabilities of the DCI-101 by providing external I/O and support for up to 4 Genie Nano cameras. The PL-USB simplifies hardware setup and provides a consistent I/O solution for iNspec Express and Sherlock application software. The PL-USB can support Genie Nano cameras in synchronous (triggered at the same time) or asynchronous (triggered independently) configurations. The module connects to the GEVA 400 through a USB cable.

Both products are DIN mountable.

