Overview

Vision System with Integrated Touch Screen

The GEVA-312T is an integrated vision system complete with a 12" touch screen display, 1.6GHz dual core processor and two Gigabit Ethernet camera ports. The slim-line form factor maximizes control panel real estate for PLCs, motions controllers and non-vision related components. The GEVA-312T is a good choice for customers who are looking for a complete system that is low-cost, expandable and applicable for a wide range of vision applications.

The GEVA-312T is compatible with the full range of Teledyne DALSA Genie cameras. Applications using one or two cameras can connect directly to the Camera/LAN ports on the unit. Additional cameras can be accommodated using standard, low-cost Gigabit Ethernet switches. I/O connections, including camera trigger and light strobes, are interfaced using our standard PL-USB module. This module mounts inside the control panel and connects to one of the GEVA-312T USB ports (multiple PL-USB modules can be installed).

In addition to touch panel control, the front of the unit provides push button display adjustments and a USB port that provides convenient access for removable peripherals such as keyboard/mouse and backup storage.

Key Features

- Integrated 12" touch display
- 1.6GHz dual core processor
- Two expandable camera ports
- Compatible with full range of GigE cameras
- Direct connect I/O module
- Windows 7 embedded OS
- Choice of embedded vision application software
- Push button display adjustments and convenient USB port on front
- Slim-line panel or VESA mountable enclosure

Choice of Application Software

The GEVA-312T is available with choice of application software to suit the differing needs and experience of our users. The iNspect Express software offers a suite of standard capabilities inside an easy-to-use interface that simplifies vision deployment for many applications. For more advance needs, our Sherlock software offers additional flexibility and control that is better suited for vision integrators.

iNspect Express Software

iNspect Express supports applications that use up to 8 cameras of the same type. The interface has been designed to allow setup and deployment of solutions with little or no prior vision experience. iNspect Express provides a common set of tools and capabilities that are relevant for most applications and industries.

Sherlock Software

Sherlock offers flexible camera interfacing, together with a rich suite of vision capabilities that can be applied to the most challenging of applications. Sherlock supports advanced scripting, custom operator interface design and the inclusion of 3rd party proprietary algorithms.
## Specifications

- Atom N2600@1.6GHz processor
- 2GB DDR3 SDRAM memory
- 32GB removable CFast storage
- Windows 7 Embedded OS
- iNspect Express or Sherlock application software
- 5 USB (1 on front) peripherals
- 2 GigE Camera/LAN ports
- 4 RS-232 comm ports
- 12.1" 1024x768 XGA / LCD touch panel display
- External via PL-USB I/O
- 24V via removable header power
- Fanless, slim-line enclosure
- Panel or VESA 75/100 mounting
- CE, FCC Class B, IP65 compliance

## Comparison with other GEVA models

The GEVA-312T is closest in performance and price to the GV-300. If you already have a display, the GV-300 is a better match for its size and number of camera ports. However, if you’re looking for a standalone system with a built-in touch screen display, the GEVA-312T offers great price and performance over competitive products.

See how the GEVA-312T compares to other GEVA models:

### GEVA Selection Chart

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>GV 300</th>
<th>GV 312T</th>
<th>GV 1000</th>
<th>GV 3000</th>
<th>GV 3000CL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space saving</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Cost</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Integrated display</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>1 or 2 cameras</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>3 or more cameras</td>
<td>✔</td>
<td>via switch</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>No moving parts</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Performance</td>
<td>good</td>
<td>good</td>
<td>very good</td>
<td>excellent</td>
<td>excellent</td>
</tr>
<tr>
<td>I/O</td>
<td>PL-USB</td>
<td>PL-USB</td>
<td>✔</td>
<td>PL-USB</td>
<td>✔</td>
</tr>
<tr>
<td>Line scan</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

### REQUIREMENT
- Windows 7 Embedded 32-bit
- iNspect Express (-03 model)
- Sherlock (-04 model)

### SYSTEM COMPONENTS
- GV-312T (controller + HMI)
- PL-USB (external I/O)
- GigE Cameras & Cables

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www.teledynedalsa.com

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