

# Genie HC1400

Area Scan Color Cameras



Genie HC1400

## Key Features

- Uses standard PC and server Ethernet ports & hardware
- Facilitates cable lengths up to 100 m (CAT-5e or CAT-6)
- Simplified set-up with field proven Sapera Essential software featuring CamExpert
- Engineered to accommodate industrial environment with a Ruggedize, screw mount, RJ-45 connector
- Small compact form factor
- DALSA Platform Development Advantage – Free Run-time Licensing<sup>1</sup>

## Programmability

- Achieve 75 fps in full resolution
- Higher frame rates achievable in partial scan mode
- Global electronic shutter with exposure control
- On-board flat-field correction
- 1000x antiblooming

## Typical Applications

- Electronics manufacturing inspection
- Industrial metrology
- Intelligent traffic systems
- Food Inspection

## Overview

# Extreme high speed acquisition with uncompromised image quality.

The Genie HC1400 offers unprecedented high speed image acquisition with uncompromised signal-to-noise ratio, significantly optimizing the opportunity for increased yield. DALSA's proprietary sensor technology allows for image capture rates of 75 fps in 1400 x 1024 resolution while maintaining exceptional image quality. The Genie HC1400's gigabit Ethernet interface takes full advantage of this Genie's high frame rate by transmitting data over standard CAT-5e and CAT-6 cables to distances of up to 100 m. Like all Genies, the HC1400 is based on the AIA (Automated Imaging Association) GigE Vision Standard to directly link the camera to a PC.



## Specifications

|                       |   |
|-----------------------|---|
| Active Resolution     | 1400 x 1024                                     |
| Frame Rate            | 75 fps  |
| Pixel Size            | 7.4 $\mu\text{m}$                               |
| Data Format           | 8 & 10 bits Raw Bayer                           |
| Exposure Control      | Programmable, or via External Trigger           |
| Dynamic Range         | 48 dB   |
| Nominal Gain Range    | 0 dB to +12 dB                                  |
| Output                | Gigabit Ethernet, also supports 100 Mbps        |
| I/O Ports             | 2 opto-isolated input, 2 opto-isolated output,  |
| Lens Mount            | CS-mount / Right-Angle option is also available |
| Size                  | 44 mm x 29 mm x 67 mm (including lens adapter)  |
| Mass                  | ~115 g (without lens)                           |
| Operating Temp        | 0°-45°C   |
| Power Supply          | 12 to 24V                                       |
| Power Dissipation     | 4W  |
| Data Connector        | Standard or Screw mount RJ-45                   |
| Power and I/O         | Hirose 12-Pin                                   |
| Software Platform     | DALSA Sapera LT                                 |
| GigE Vision Compliant | Yes   |
| Regulatory Compliance | FCC Class A, CE, RoHs 2002/95/EC                |
| Part Number           | CR-GC00-H140x                                   |

### DALSA Platform Development Advantage - Free Run-Time Licensing

The Sapera Essential standard processing tool run-time license is offered at no additional charge when combined with the DALSA frame grabbers. This software run-time license<sup>1</sup> includes access to over 400 image processing functions, area-based (normalized correlation based) template matching tool, blob analysis and lens correction tool.

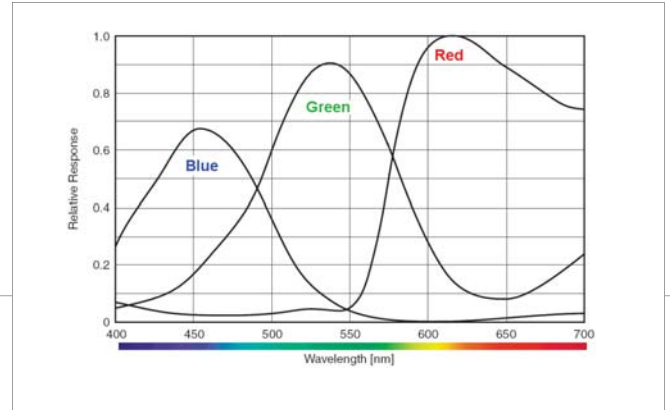
<sup>1</sup> Some conditions and limitations apply, contact DALSA sales for details.



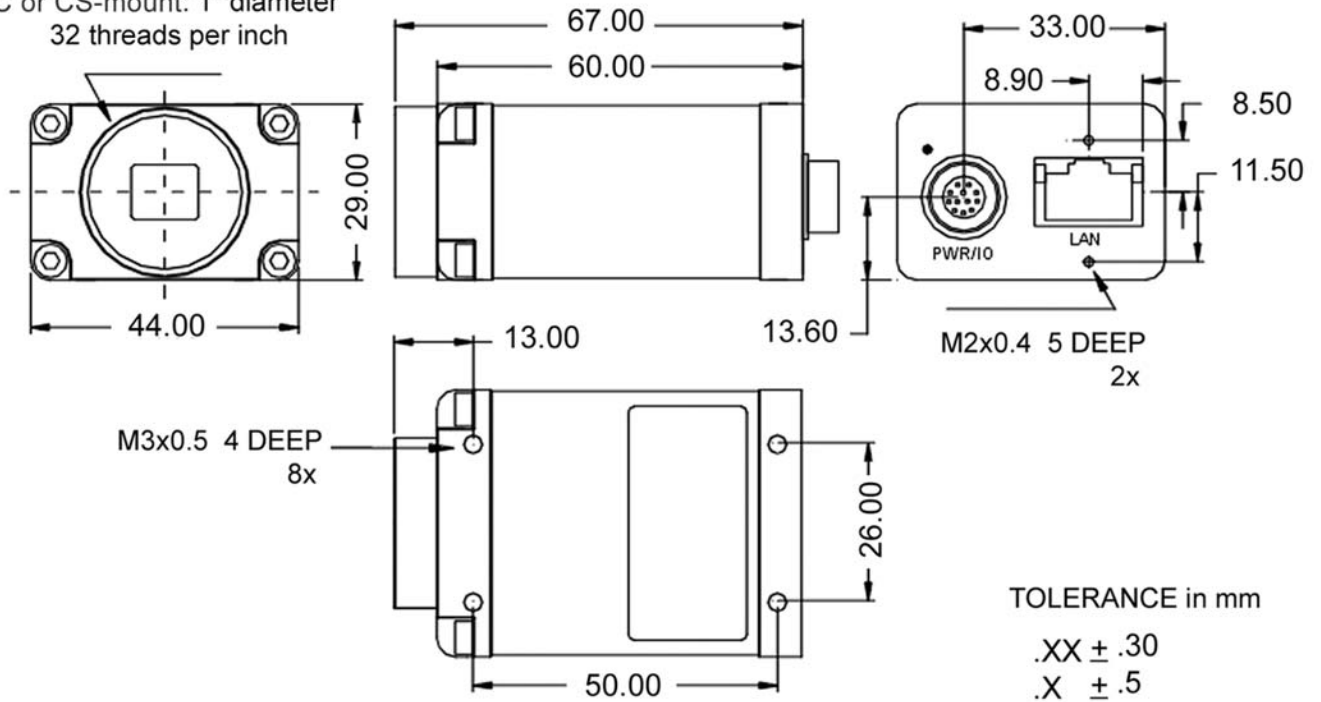
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All Genie cameras feature value added functionality designed specifically for imaging and machine vision applications. All features are easily accessible with DALSA's advanced software tools. These tools deliver superior image capture, performance, and control.



C or CS-mount: 1" diameter  
32 threads per inch



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

## Americas

Boston, USA  
 Tel: +1 978-670-2000  
 sales.americas@dalsa.com

## Europe

Munich, Germany  
 Tel: +49 8142-46770  
 sales.europe@dalsa.com

## Asia Pacific

Tokyo, Japan  
 +81 3-5960-6353  
 sales.asia@dalsa.com

DALSA is an international leader in digital imaging and semiconductors and has its corporate offices in Waterloo, Ontario, Canada.

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