

# Genie HC640

Area Scan Color Cameras



## 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 Sopera Essential software featuring CamExpert
- Engineered to accommodate industrial environment with a Ruggedize, screw mount, RJ-45 connector
- Small compact form factor
- Teledyne DALSA Platform Development Advantage – Free Run-Time Licensing<sup>1</sup>

## Programmability

- Achieve 300 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 HC640 offers unprecedented high speed image acquisition with uncompromised signal-to-noise ratio, significantly optimizing the opportunity for increased yield. Teledyne DALSA's proprietary sensor technology allows for image capture rates of 300 fps in VGA resolution while maintaining exceptional image quality. The Genie HC640'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 HC640 is based on the AIA (Automated Imaging Association) GigE Vision Standard to directly link the camera to a PC.



Active Resolution	640 x 480
Frame Rate	300 fps
Pixel Size	7.4 $\mu\text{m}$
Data Format	8-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	C or 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	Teledyne DALSA Sopera LT
GigE Vision Compliant	Yes
Regulatory Compliance	FCC Class A, CE, RoHs 2002/95/EC
Part Number	CR-GC00-H640x

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

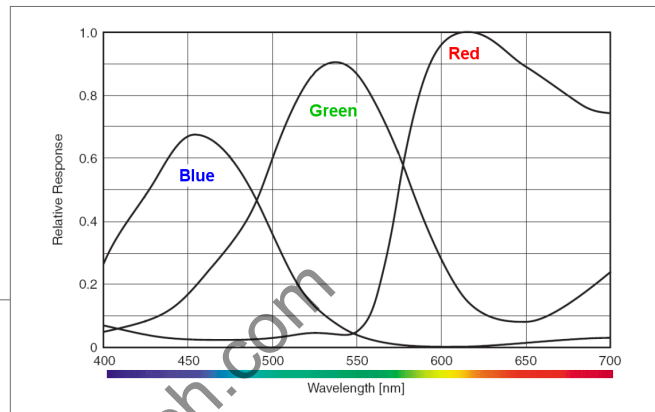
The Sopera Essential standard processing tool run-time license is offered at no additional charge when combined with the Teledyne DALSA frame grabbers. This software run-time license<sup>1</sup> includes access to over 400 image processing functions, area-based (normalized correlation based) template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

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

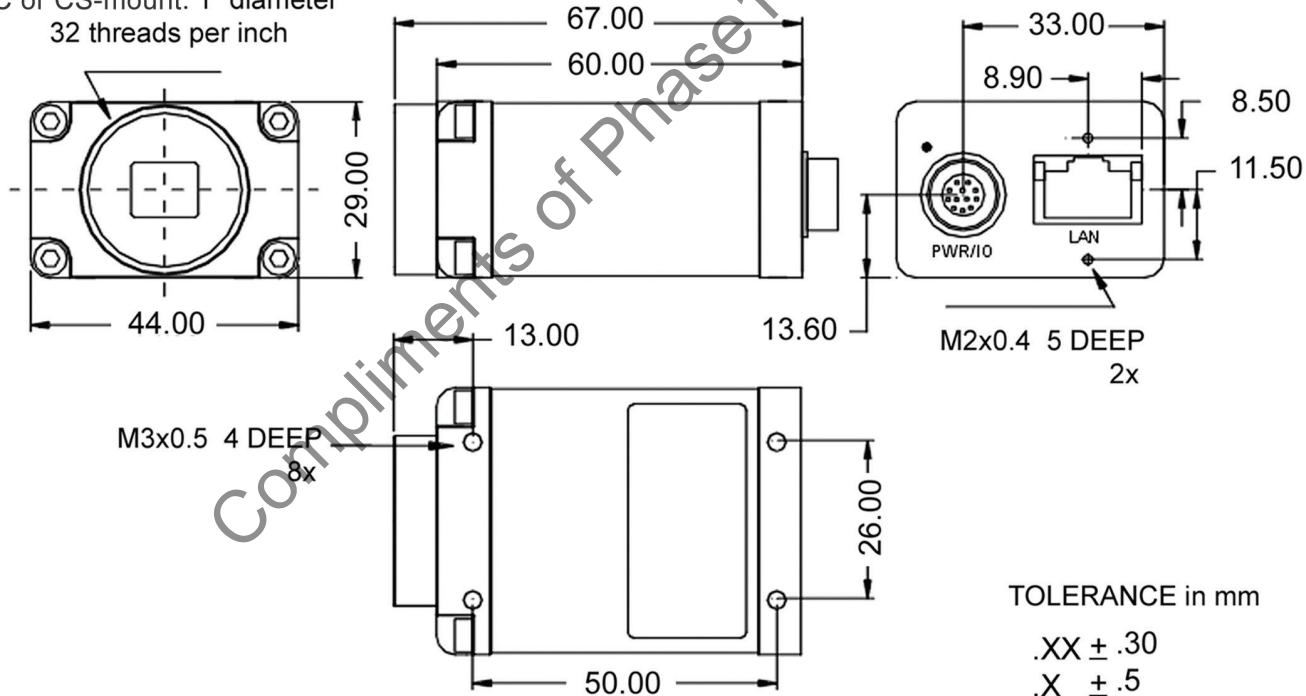
# Genie HC640

## Area Scan Color Cameras

All Genie cameras feature value added functionality designed specifically for imaging and machine vision applications. All features are easily accessible with Teledyne 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.teledynedalsa.com](http://www.teledynedalsa.com)

### Americas

Boston, USA  
 Tel: +1 978-670-2000  
[sales.americas@teledynedalsa.com](mailto:sales.americas@teledynedalsa.com)

### Europe

Munich, Germany  
 Tel: +49 8142-46770  
[sales.europe@teledynedalsa.com](mailto:sales.europe@teledynedalsa.com)

### Asia Pacific

Tokyo, Japan  
 +81 3-5960-6353  
[sales.asia@teledynedalsa.com](mailto:sales.asia@teledynedalsa.com)

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

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