### Genie™ Nano-C1940

Area Scan Color Cameras



#### **Key Features**

- Uses standard PC Ethernet port & hardware
- Supports cable lengths up to 100 m (CAT-5e or CAT-6)
- Simplified set-up with field proven Sapera LT software featuring CamExpert
- Engineered to accommodate industrial environment with a Ruggedize, screw mount, RJ-45 connector

#### **Programmability**

- Higher frame rates achievable in partial scan mode
- Global electronic shutter with exposure Control
- Multi-Exposure Feature
- Multi-ROI Feature

#### **Typical Applications**

- Electronics manufacturing inspection
- · Industrial metrology
- Intelligent traffic systems

#### **Regulatory Compliance**

· CE, FCC and RoHS

#### Overview

# Small compact GigE Vision camera with uncompromised image quality.

The Genie Nano-C1940 uses the Sony Pregius IMX174 2.3M Color sensor with a resolution of 1920 x 1200. Teledyne DALSA's "Burst Acquisition" and "Turbo Drive" feature allows for image capture rates of 84 fps in 2.3M pixels resolution while maintaining exceptional image quality. The Genie Nano-C1940 takes advantage of gigabit Ethernet technology, transmitting data over standard CAT-5e and CAT-6 cables to distances of up to 100 m. Like all Teledyne DALSA GigE cameras, the Genie Nano-C1940 is based on AIA (Automated Imaging Association) GigE Vision Standard to directly link the camera to a PC.



#### **Specifications**

Active Resolution

Acquisition Frame Rate

1920 x 1200 84 fps ( with TurboDrive™)

Data Output Transfer

Gigabit Ethernet (1000 Mbit/s) only

Pixel Size 5.86 μm x 5.86 μm

Data Format
Exposure Control

Raw Bayer 8 or 10-Bits output (User selectable)
Automatic, Programmable, or via External Trigger

Dynamic Range 71.8 dB

Gain Control Automatic, Manual up to 48 dB

I/O Ports 2 opto-isolated input, 2 opto-isolated output

Image Buffer 96 MB of On-board memory
Lens Mount Cand CS-Mount available

Size (L x H x W) 21.2 mm x 29 mm x 44 mm (without lens adapter or connectors)

38.9 mm x 29 mm x 44 mm (with lens adapter and connectors)

Mass ~46

Operating Temp -20 to +60c (Housing temperature)

Power Supply 10 to 36V or Power Over Ethernet (POE)

Power Dissipation 3.6 W (12V) 4.1 W (PoE)

Data Connector Standard or Vertical Screw mount RJ-45

Power and I/O Connector SAMTEC TFM-105 type

Camera Specification GigE Vision v1.2 Compliant

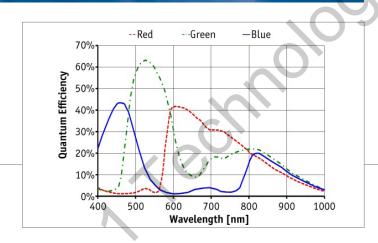
Software Platform Teledyne DALSA Sapera LT 8.0 or 3rd Party Genicam Compliant SDK

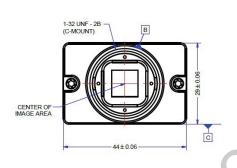
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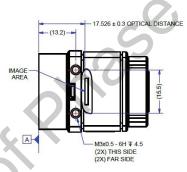


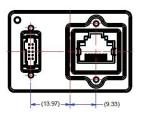
## Genie<sup>™</sup> Nano-C1940 Area Scan Color Cameras

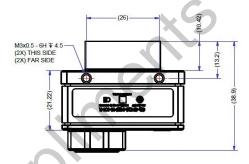
All Genie cameras feature value added functionality designed specifically for imaging and machine vision applications. All features are easily accessible with Teledyne DALSA's advanced software tools. These tools deliver superior image capture, performance, and control.

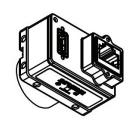














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### Genie™ Nano-M1940

Area Scan Monochrome Cameras



#### **Key Features**

- Uses standard PC Ethernet port & hardware
- Supports cable lengths up to 100 m (CAT-5e or CAT-6)
- Simplified set-up with field proven Sapera LT software featuring CamExpert
- Engineered to accommodate industrial environment with a Ruggedize, screw mount, RJ-45 connector

#### **Programmability**

- Higher frame rates achievable in partial scan mode
- Global electronic shutter with exposure Control
- Multi-Exposure Feature
- Multi-ROI Feature

#### **Typical Applications**

- Electronics manufacturing inspection
- · Industrial metrology
- Intelligent traffic systems

#### **Regulatory Compliance**

· CE, FCC and RoHS

#### Overview

# Small compact GigE Vision camera with uncompromised image quality.

The Genie Nano-M1940 uses the Sony Pregius IMX174 2.3M Monochrome sensor with a resolution of 1920 x 1200. Teledyne DALSA's "Burst Acquisition" and "Turbo Drive" feature allows for image capture rates of 84 fps in 2.3M pixels resolution while maintaining exceptional image quality. The Genie Nano-M1940 takes advantage of gigabit Ethernet technology, transmitting data over standard CAT-5e and CAT-6 cables to distances of up to 100 m. Like all Teledyne DALSA GigE cameras, the Genie Nano-M1940 is based on AIA (Automated Imaging Association) GigE Vision Standard to directly link the camera to a PC.



#### **Specifications**

Active Resolution

Acquisition Frame Rate 84 fps (with TurboDrive™)

Data Output Transfer Gigabit Ethernet (1000 Mbit/s) only

1920 x 1200

Pixel Size 5.86 μm x 5.86 μm

Data Format 8 or 10-Bits output (User selectable)

Exposure Control Automatic, Programmable, or via External Trigger

Dynamic Range 71.8 dB

Gain Control Automatic, Manual up to 48 dB

I/O Ports 2 opto-isolated input, 2 opto-isolated output

Image Buffer 96 MB of On-board memory
Lens Mount Cand CS-Mount available

Size (L x H x W) 21.2 mm x 29 mm x 44 mm (without lens adapter or connectors)

38.9 mm x 29 mm x 44 mm (with lens adapter and connectors)

Mass ~46g

Operating Temp -20 to +60c (Housing temperature)

Power Supply 10 to 36V or Power Over Ethernet (POE)

Power Dissipation 3.6 W(12V) 4.1 W (PoE)

Data Connector Standard or Vertical Screw mount RJ-45

Power and I/O Connector SAMTEC TFC-105 type

Camera Specification GigE Vision v1.2 Compliant

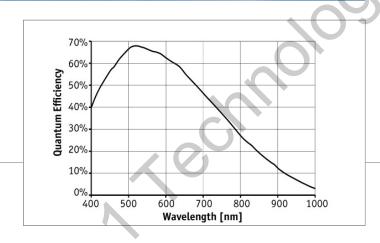
Software Platform Teledyne DALSA Sapera LT 8.0 or 3rd Party Genicam Compliant SDK

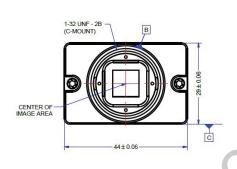
Part Number G3-GM10-M1940 (for C-mount option)

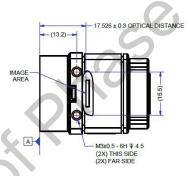


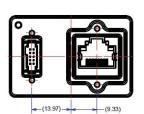
## Genie<sup>™</sup> Nano-M1940 Area Scan Monochrome Cameras

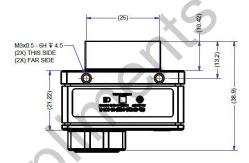
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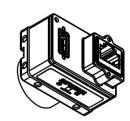














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