

Genie™ Nano-M1940

Area Scan Monochrome Cameras



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.



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 Sopera 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

Specifications

Active Resolution	1920 x 1200
Acquisition Frame Rate	84 fps (with TurboDrive™)
Data Output Transfer	Gigabit Ethernet (1000 Mbit/s) only
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	C and 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 Sopera LT 8.0 or 3rd Party Genicam Compliant SDK
Part Number	G3-GM10-M1940 (for C-mount option)

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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 Teledyne DALSA's advanced software tools. These tools deliver superior image capture, performance, and control.

