



Genie™ Nano 5GigE Cameras

Smaller, faster, stronger, cheaper.

Compact GigE Vision cameras with unprecedented speed and uncompromised image quality.

Introducing the Genie Nano-5G, a GigE Vision CMOS area scan camera that redefines **high** performance. Genie Nano starts with industry leading image CMOS sensors and adds proprietary camera technology for **breakthrough speed**, a robust build quality for wide operating temperature, and an unmatched feature set — all at an **incredible price**. Teledyne DALSA's proprietary **TurboDrive™** technology allows Genie Nano to deliver its full image quality at faster frame rates — often 150% or higher. Like all Teledyne DALSA GigE cameras, the Genie Nano-5G is based on AIA GigE Vision Standard to directly link the camera to a PC.



TURBODRIVE 
BY TELEDYNE DALSA

Key Features

- 5 GigE Ethernet port & hardware
- Supports cable lengths up to 100 m (CAT-5e, CAT-6) or (4T-6A)
- Simplified set-up with field proven Sopera LT software featuring CamExpert
- Engineered to accommodate industrial environment with a ruggedized 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
- Metadata support
- IEEE1588 (Precision Time Protocol) support
- Binning
- Look-up-table and More

Reliability

- Robust all-metal body
- 3 year warranty
- Trigger to Image Reliability (T2IR) framework improves the reliability of your inspection system and protects you from data loss

Typical Applications

- Electronics manufacturing inspection
- Industrial metrology
- Intelligent traffic systems

Regulatory Compliance

- CE, FCC and RoHS

GENIE NANO INDIVIDUAL MODEL SPECIFICATIONS

	Active Resolution	Sensor Model	Frame Rate (Burst Mode)	Pixel Size	Dynamic Range	Max. Image Circle	Data Format	Part Number (for C-mount option)
●● Nano-5G-M2050	2064 x 1544	Sony IMX252	190 fps	3.45 μm	76.46 dB	1/1.8" Optical Format	8-Bit Mono	G5-GM30-M2050
●●● Nano-5G-C2050	2064 x 1544	Sony IMX252	190 fps	3.45 μm	76.46 dB	1/1.8" Optical Format	8-Bit Raw Bayer	G5-GC30-C2050
●●● Nano-5G-M2450	2464 x 2056	Sony IMX250	141 fps	3.45 μm	76.46 dB	2/3" Optical Format	8-Bit Mono	G5-GM30-M2450
●●● Nano-5G-C2450	2464 x 2056	Sony IMX250	141 fps	3.45 μm	76.46 dB	2/3" Optical Format	8-Bit Raw Bayer	G5-GC30-C2450
●●● Nano-5G-M4060	4112 x 2176	Sony IMX255	88 fps	3.45 μm	76.46 dB	1" Optical Format	8-Bit Mono	G5-GM30-M4060
●●● Nano-5G-C4060	4112 x 2176	Sony IMX255	88 fps	3.45 μm	76.46 dB	1" Optical Format	8-Bit Raw Bayer	G5-GC30-C4060
●●● Nano-5G-M4040	4112 x 3008	Sony IMX253	63 fps	3.45 μm	76.46 dB	1.1" Optical Format	8-Bit Mono	G5-GM30-M4040
●●● Nano-5G-C4040	4112 x 3008	Sony IMX253	63 fps	3.45 μm	76.46 dB	1.1" Optical Format	8-Bit Raw Bayer	G5-GC30-C4040



GENIE NANO FAMILY SPECIFICATIONS (COMMON TO ALL MODELS)

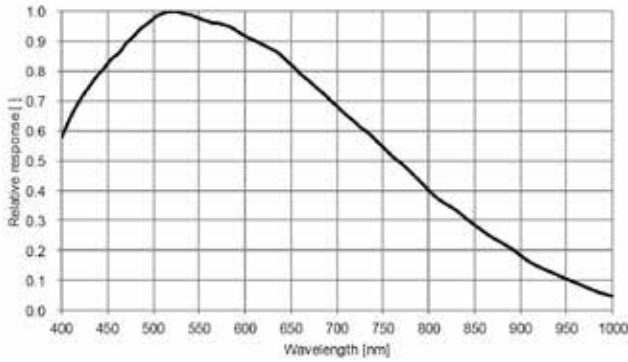
GENIE NANO-5G	
Data Output Transfer	Gigabit Ethernet (1Gbps ,2.5Gbps or 5Gbps — auto-negotiate)
Exposure Control	Automatic, programmable, or via external trigger
I/O Ports	2 opto-isolated inputs, 2 opto-isolated outputs
Image Buffers (On-board memory)	450 MB
Lens Mount	C-Mount
Size (L x H x W) (C-mount option)	32 mm x 44 mm x 59 mm (no lens adapter) 42 mm x 44 mm x 59 mm (with lens adapter and connectors)
Mass	124 g
Operating Temp	-20 to +65°C (housing temperature)
Power Supply	10 to 36V or Power Over Ethernet (POE)
Power Dissipation (model dependent)	TBD
Data Connector	Standard or screw mount RJ-45
Power and I/O Connector	SAMTEC TFM-105 type
Camera Specification	GigE Vision v2.0
Software Platform	Teledyne DALSA Sapera LT 8.32 for Windows, Teledyne DALSA GigE-V for Linux or 3rd Party GenICam compliant SDK



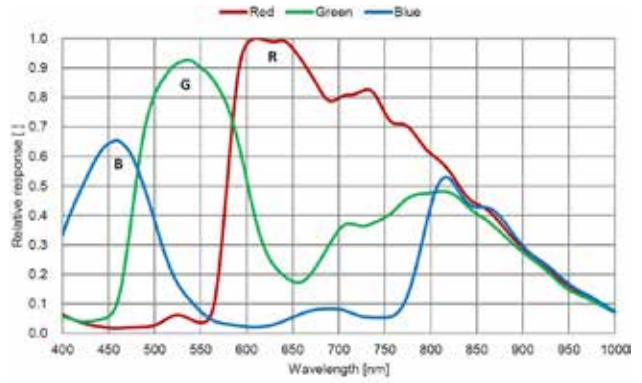
RESPONSIVITY GRAPHS

Spectral Sensitivity Characteristics

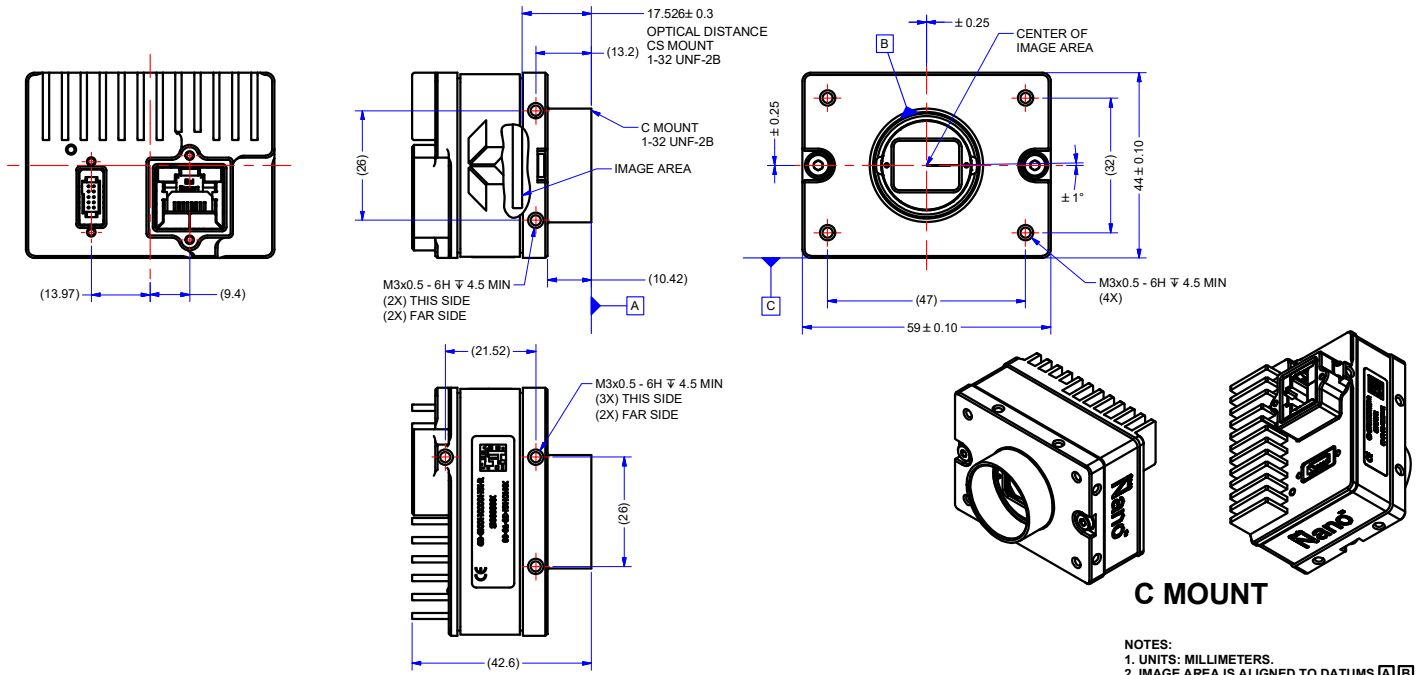
(Excludes lens characteristics and light source characteristics.)



M4060
M4040
M4030
M4020
M2020
M2050
M2420
M2450



C4060
C4040
C4030
C4020
C2020
C2050
C2420
C2450



www.teledynedalsa.com

Americas

Boston, USA
+1 978-670-2000
sales.americas@teledynedalsa.com

Europe

Krailling, Germany
+49 89-89-54-57-3-80
sales.europe@teledynedalsa.com

Asia Pacific

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

Shanghai, China
+86 21-3368-0027
sales.asia@teledynedalsa.com

Teledyne DALSA has its corporate offices in Waterloo, Canada

Teledyne DALSA reserves the right to make changes at any time without notice. Teledyne DALSA © 2018 | Oct



Part of the Teledyne Imaging Group



Versatile camera series featuring Pregius® and Python® sensors

www.teledynedalsa.com

Americas

Boston, USA
+1 978-670-2000
sales.americas@teledynedalsa.com

Europe

Krailling, Germany
+49 89-89-54-57-3-80
sales.europe@teledynedalsa.com

Asia Pacific

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

Shanghai, China
+86 21-3368-0027
sales.asia@teledynedalsa.com

Teledyne DALSA has its corporate offices in Waterloo, Canada
Teledyne DALSA reserves the right to make changes at any time without notice. Teledyne DALSA © 2018 | Oct