



# 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	1/1.2" Optical Format	8-Bit Mono	G5-GM30-M2050
● Nano-5G-C2050	2064 x 1544	Sony IMX252	190 fps	3.45 μm	76.46 dB	1/1.2" 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	1/1.8" Optical Format	8-Bit Mono	G5-GM30-M4060
● Nano-5G-C4060	4112 x 2176	Sony IMX255	88 fps	3.45 μm	76.46 dB	1/1.8" 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	1/1.8" Optical Format	8-Bit Mono	G5-GM30-M4040
● Nano-5G-C4040	4112 x 3008	Sony IMX253	63 fps	3.45 μm	76.46 dB	1/1.8" Optical Format	8-Bit Raw Bayer	G5-GC30-C4040



## GENIE NANO FAMILY SPECIFICATIONS (COMMON TO ALL MODELS)

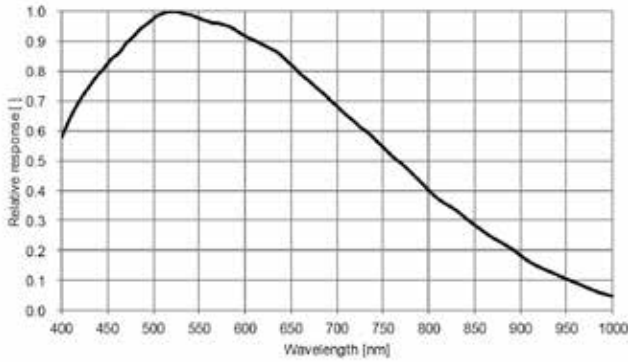
GENIE NANO-5G	
Data Output Transfer	Gigabit Ethernet (1Gbps, 2.5Gbps or 5Gbps — auto-negotiate)
Exposure Control	Automatic, programmable, or via external trigger
I/O Ports	2 opto-isolated inputs, 2 opto-isolated outputs
Image Buffers (On-board memory)	450 MB
Lens Mount	C-Mount
Size (L x H x W) (C-mount 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



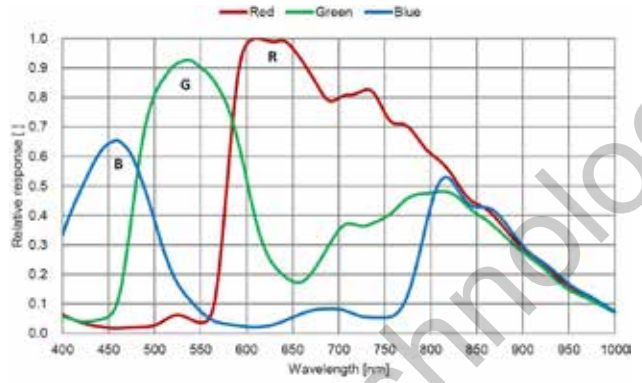
# RESPONSIVITY GRAPHS

## Spectral Sensitivity Characteristics

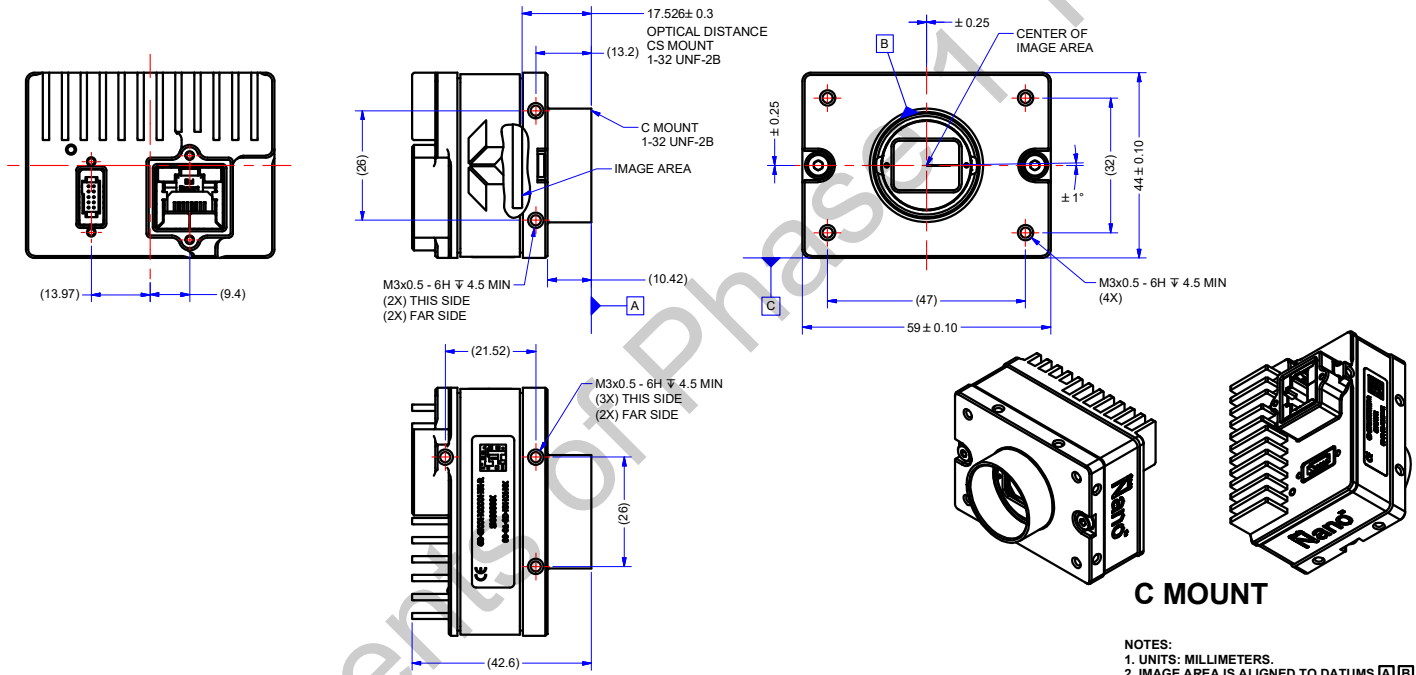
(Excludes lens characteristics and light source characteristics.)



M4060  
M4040  
M4030  
M4020  
M2020  
M2050  
M2420  
M2450



C4060  
C4040  
C4030  
C4020  
C2020  
C2050  
C2420  
C2450



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