



# Genie™ Nano-CXP Cameras

Smaller, faster, stronger, cheaper.

Compact CoaXPress cameras with unprecedented speed and uncompromised image quality.

Introducing **Genie Nano-CXP**, a CMOS area scan camera that redefines performance. Genie Nano-CXP starts with industry leading image CMOS sensors from 16 to 67 megapixel resolution and adds proven CoaXPress 6Gbps technology for **breakthrough speed**, a robust build quality for wide operating temperature, and an unmatched feature set—all at an **incredible price**.



## Key Features

- Industry's latest CMOS image sensors
- Simplified set-up with field proven Sapera LT software featuring CamExpert
- Engineered to accommodate industrial environment with DIN connectors
- GenICam GenCP compliant

## Programmability

- Higher frame rates achievable in partial scan mode
- Global electronic shutter with exposure control
- Multi-ROI feature

## 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

- Semiconductor wafer inspection
  - Surface and bump inspection
- Electronics manufacturing
  - 3D solder paste inspection
  - Package and bump inspection
  - Automated Optical Inspection (AOI)
- Solar panel inspection
- General machine vision

## Regulatory Compliance

- CE, FCC, RoHS, GenICam, IP30, CoaXPress 1.1 KC certification

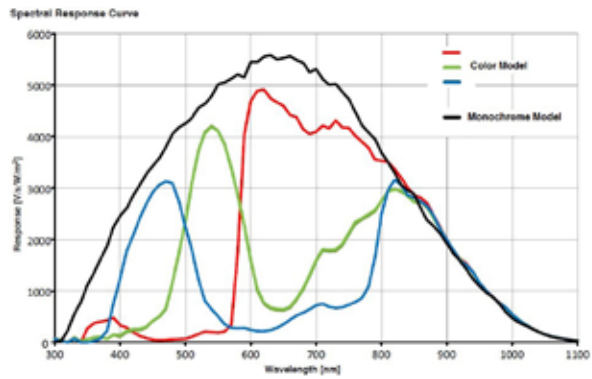
## GENIE NANO INDIVIDUAL MODEL SPECIFICATIONS

	Active Resolution	Sensor Model	Frame Rate**	Pixel Size	Dynamic Range	Max. Image Circle	Data Format	Part Number
●● CXP-M4090	4096 x 4096	On-Semi Python 16K (16M)	120 fps	4.5 μm	55.2 dB	APS-H Optical Format	8 or 10-Bit Mono	G3-XM30-M4095
●● CXP-M4090-NIR	4096 x 4096	On-Semi Python 16K (16M)	120 fps	4.5 μm	55.2 dB	APS-H Optical Format	8 or 10-Bit Mono	G3-XM32-M4095
●●● CXP-C4090	4096 x 4096	On-Semi Python 16K (16M)	120 fps	4.5 μm	55.2 dB	APS-H Optical Format	8 or 10-Bit Bayer	G3-XC30-C4095
●● CXP-M5100	5120 x 5120	On-Semi Python 25K (25M)	80 fps	4.5 μm	55.2 dB	APS-H Optical Format	8 or 10-Bit Mono	G3-XM30-M5105
●● CXP-M5100-NIR	5120 x 5120	On-Semi Python 25K (25M)	80 fps	4.5 μm	55.2 dB	APS-H Optical Format	8 or 10-Bit Mono	G3-XM32-M5105
●●● CXP-C5100	5120 x 5120	On-Semi Python 25K (25M)	80 fps	4.5 μm	55.2 dB	APS-H Optical Format	8 or 10-Bit Bayer	G3-XC30-C5105
●● CXP-M6200	6144 x 6144	Teledyne e2v Emerald 36M	43 fps	2.5 μm	66 dB	4/3" Optical Format	8 or 10-Bit Mono	G3-XM01-M6205
●●● CXP-C6200	6144 x 6144	Teledyne e2v Emerald 36M	43 fps	2.5 μm	66 dB	4/3" Optical Format	8 or 10-Bit Bayer	G3-XC01-C6205
●● CXP-M8200	8192 x 8192	Teledyne e2v Emerald 67M	30 fps	2.5 μm	66 dB	APS-C Optical Format	8 or 10-Bit Mono	G3-XM01-M8205
●●● CXP-C8200	8192 x 8192	Teledyne e2v Emerald 67M	30 fps	2.5 μm	66 dB	APS-C Optical Format	8 or 10-Bit Bayer	G3-XC01-C8205

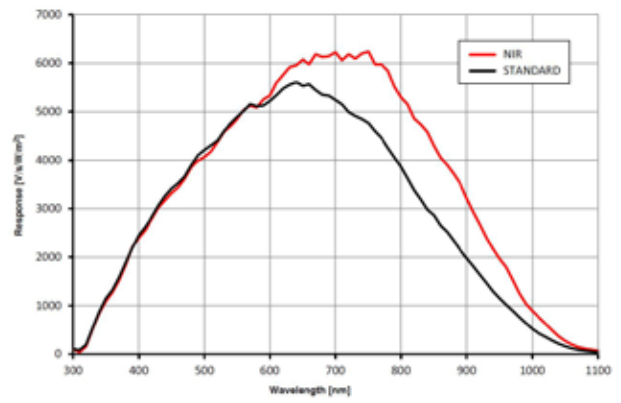
## GENIE NANO FAMILY SPECIFICATIONS (COMMON TO ALL MODELS)

GENIE CXP (XL Casing)	
Data Output Transfer	4 lanes x CXP-6
Exposure Control	Automatic, programmable, or via external trigger
Lens Mount	M42
Size (L x H x W) (C-mount option)	32 mm x 59 mm x 59 mm (no lens adapter or connectors)
Mass	~163 g
Operating Temp	-20 to +60° C (housing temperature)
Power Supply	+12 to +24 V or Power over CoaXPress PoCXP (PoCXP requires 2 x DIN connectors min.)
Power Dissipation (model dependent)	13 W @ 24 Volt Aux.
Data Connector	4 x DIN 1.0/2.3
Power and I/O Connector	SAMTEC TFM-105 type
Camera Specification	CoaXPress v1.1, GeniCam GenCP compliant
Software Platform	Teledyne DALSA Sopera LT 8.0 for Windows, or 3rd Party GeniCam GenCP compliant SDK

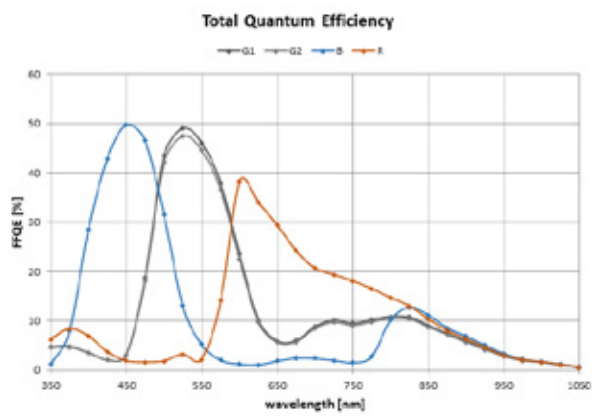
## RESPONSIVITY GRAPHS



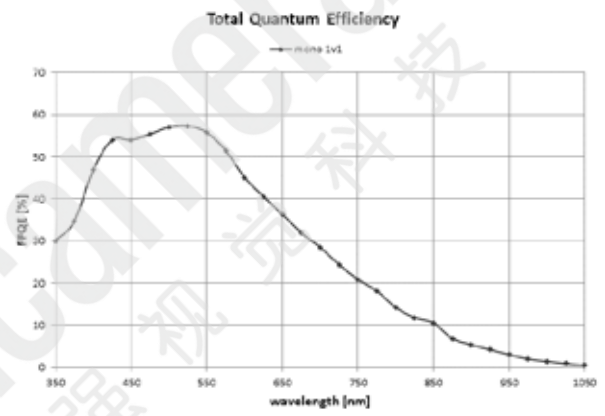
C4090 C5100



M4090 M5100



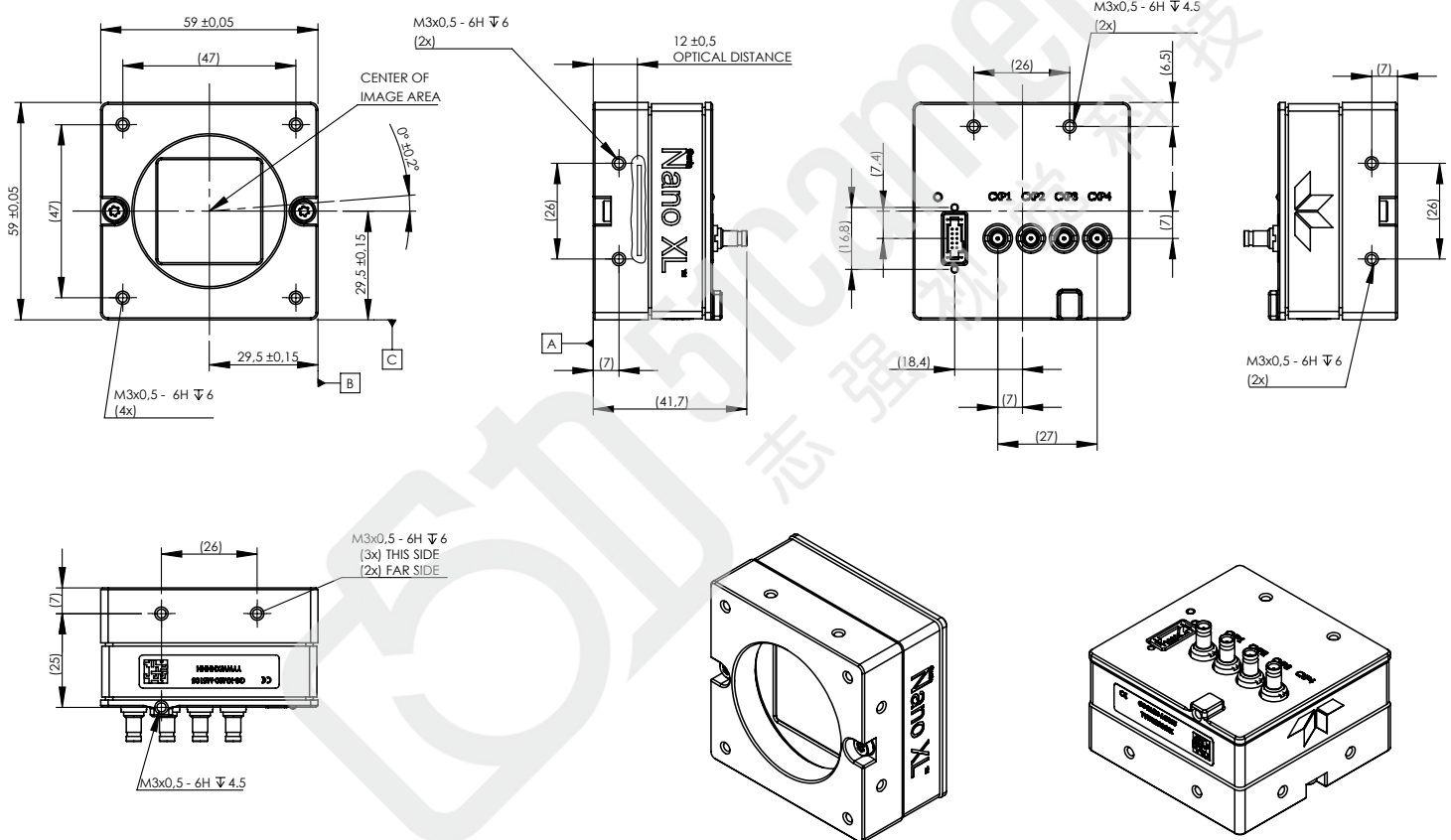
C6200 C8200



M6200 M8200

# Genie™ Nano XL Specifications

For Model 16M to 67M only



NOTES:  
1. UNITS : MILLIMETERS.  
2. IMAGE AREA IS ALIGNED TO DATUMS **A**, **B** & **C**



# Versatile camera series featuring E2V and On-Semiconductor sensors

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