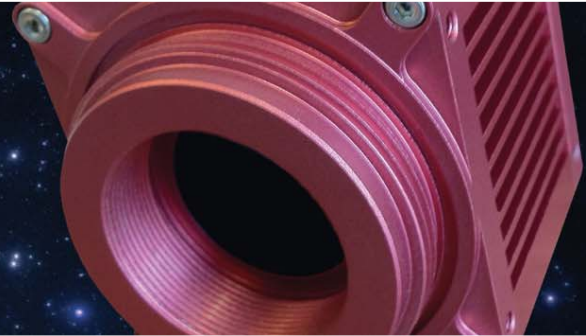
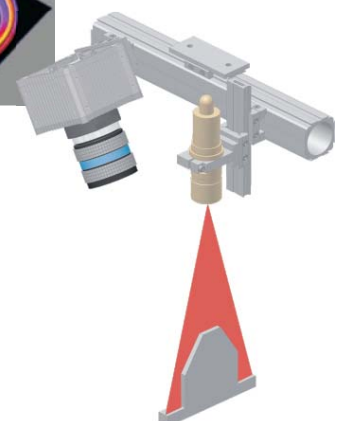
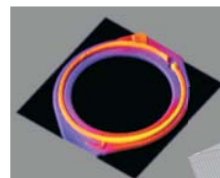
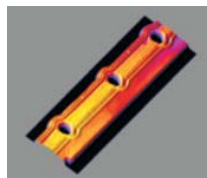
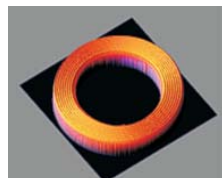
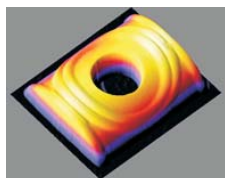


# C2 Series

High-Speed 3D Sensors by means of Laser-Triangulation



- High Resolution and High Speed 3D Camera
- Integrated 3D Profile High Precision Algorithms with up to 25kHz
- Excellent Price-Performance Ratio
- GigE-Vision and GenICam Compliant
- Compact Ruggedized Camera Design IP67 with optional Lens Housing
- Flexible Trigger Interface
- Ruggedized M12 Industrial Connectors
- Sophisticated 3D-Scan Features like Autostart, Automatic AOI-Search, Automatic AOI-Tracking...



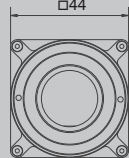
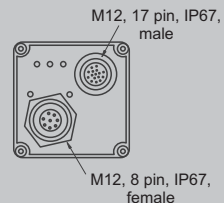
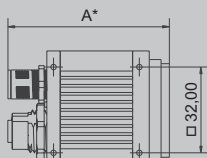
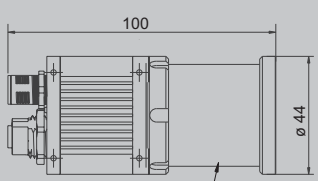






# C2 Series



## Sensor Specifications

	C2-2040HS-GigE		C2-2040-GigE		C2-640-GigE	
Sensor resolution	2048(H) x 1088(V)		2048(H) x 1088(V)		648(H) x 488(V)	
Pixel size	5.5µm x 5.5µm		5.5µm x 5.5µm		7.4µm x 7.4µm	
Dynamic Range <small>(*with HDR-3D)</small>	90dB		90dB		90dB	
Digitization	10Bit		10Bit		10Bit	
Sensitivity	16000 LSB/(µJ cm <sup>2</sup> ) @550nm		16000 LSB/(µJ cm <sup>2</sup> ) @550nm		16000 LSB/(µJ cm <sup>2</sup> ) @550nm	
Sensor algorithm	Image, Profile-MAX, Profile-TRSH, Profile-COG		Image, Profile-MAX, Profile-TRSH, Profile-COG		Image, Profile-MAX, Profile-TRSH, Profile-COG	
Length of profile in 3D-mode	2048 pixel per profile		2048 pixel per profile		648 pixel per profile	
Typical profile speed depending on number of sensor rows  Height resolution can be increased by using Profile-TRSH (1/2 pixel) or Profile-COG (1/64 pixel) without loss of speed	Sensor rows	Profile speed with 2048 pixel	Sensor rows	Profile speed with 2048 pixel	Sensor rows	Profile speed with 648 pixel
	1088	340	1088	340	488	550
	256	1400	512	710	256	1000
	128	2700	256	1400	128	1900
	32	9500	128	1400	32	6300
	16	16000	64	1400	16	10300
8	25000	16	1400	8	15100	
Max. frame rate for image mode (full frame)	- 340 fps (internal recording memory) - 50 fps (via GigE Vision)		- 340 fps (internal recording memory) - 50 fps (via GigE Vision)		- 550 fps (internal memory) - 320 fps (via GigE Vision)	

## General C2 Camera Specifications

Interface Specifications		Mechanical Size	
Digital camera I/Os	2 TTL inputs, 2 TTL outputs, inputs can be configured as image and profile trigger with tick divider and direction evaluation		
Additional I/O signals on external Terminal Unit	Resolver interface with signals A, /A, B, /B		<b>A*:</b> Model C2-640-GigE = 61mm Model C2-2040(HS)-GigE = 66mm
Integrated illumination control interface	Analog output, analog input and digital modulation for laser control		Example Protection Tube Lens L=30mm & Ø36mm Further Models on Request
Video output	GigE Vision with GenICam protocol		
power Requirements			
Power supply	10 - 24V DC		
Power consumption	<6W		
Mechanical Specifications			
Lens mount	CS-Mount / C-Mount with 5mm adapter		
Mass (without optics)	125g		
Housing mount	4 x M2.5, 4.5mm deep on each side		
Environmental Specifications			
Operating temperature	0°C to +50°C (non condensing)		
Storage temperature	-30°C to +70°C		
General		Options	
PC requirements	Gigabit Ethernet	 C-Mount / CS-Mount	 Scheimpflug Adapter
Operating systems	Windows 7, XP, Vista, WIN NT, 2000, Linux	 Starterkit	
Software environments	Configuration tool CX-Explorer, GenICam API, Compatible with any GigE vision compliant image processing library, e.g. CVB, NI-IMAQ, HALCON, MIL, VisionPro, SAL 3D	 3D-Calibration Software	 3D-Matching Software
		 CompactSensor	

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