Engineering. Performance. Dedication.

Photonfocus – Engineering the Extraordinary

As a Swiss pioneer and technological leader in CMOS image sensor and camera design Photonfocus offers a broad range of state-of-the art sensors, camera solutions and accessories. Our robust, high performing quality products meet the expectations of the most demanding customers. Furthermore, we have dedicated our extensive engineering know-how to developing and customizing individual solutions based on our software defined camera platforms as a reliable long-term partner and according to our customers' specific needs.

Photonfocus imaging solutions include:

- 3D cameras for laser-triangulation
- Hyperspectral cameras for high precision inspection applications
- High Speed cameras for sports and motion analysis
- OEM modules, board level cameras and custom designs for machine vision applications, optical metrology or other individual customer needs
- Accessories

Interested? Contact us for more information:

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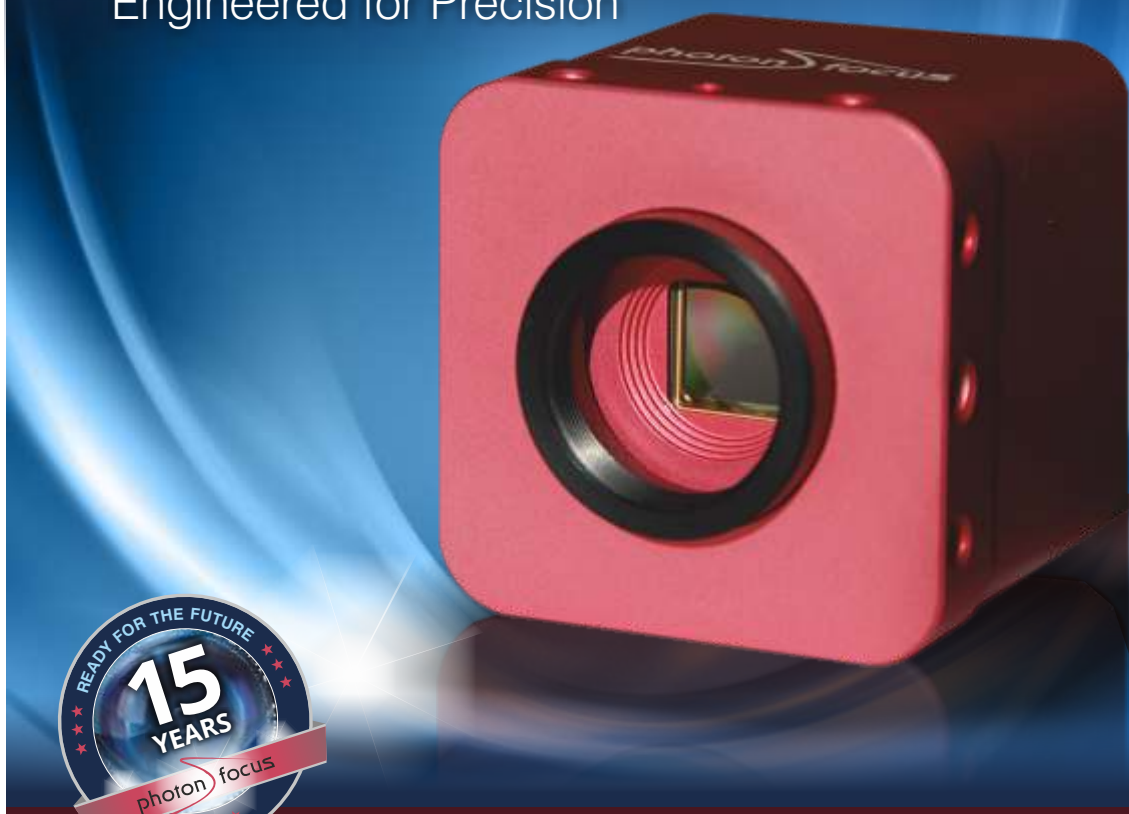
Photonfocus 3D Cameras for Laser-Triangulation

Engineered for Precision



Product Line Features at a Glance

- From low light to High Dynamic Range HDR responses
- Up to two laser lines detection inside the camera
- Up to 40000 profiles per second
- From 1 to 4 Megapixels sensor resolution
- Automatic Moving ROI
- Laser line detection with 1/64 sub-pixel resolution
- 2D single line for 2D surface inspection

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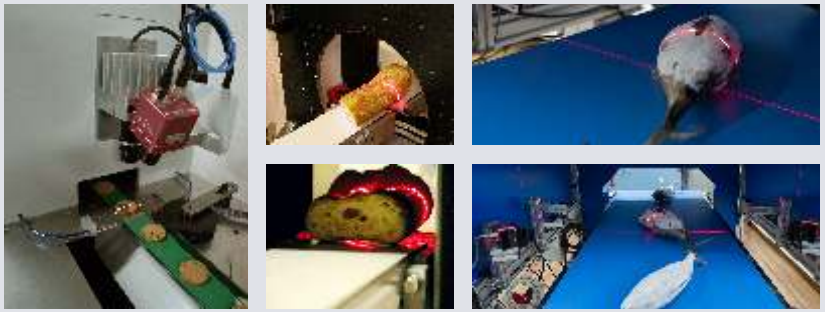
Photonfocus 3D Cameras for Laser-Triangulation

As a Swiss-based pioneer in CMOS cameras and sensors since 2001, Photonfocus is dedicated to solutions that stand out from the crowd. With our comprehensive engineering know-how dating back to the early days of 3D technology, we are continuing to help our customers make their inspection, sorting and tracking applications faster, easier and more accurate, enhancing the performance of automated industrial processes. Offering both standard and customized solutions, our reliable, versatile and powerful cameras with high triangulation rates are made for easy integration and perfect fit within your 3D vision system.

Areas of Application

- Industrial Applications, such as bin picking and optical metrology
- 3D Welding Inspection: car body, tailored blanks, gears and more
- Railway Industry: railway inspection, catenary inspection, wheel inspection
- Medical: implants, including dental
- Food Industry: inspection, sorting, calibration
- Wood Industry: size, cracks, quality, fungizide inspection
- PCB and Electronics: solder paste and BGA inspection
- OEM Solutions: heavy industry profile scanning, food scanning
- Ceramic Industry: form accuracy



Camera Overview

	MV1-D1024E-3D02	MV1-D1312-3D02	MV1-D12048x1088-3D03	MV1-D12048-3D04	NEU MV1-D1280-L01-3D05
Resolution	1024 x 1024	1312 x 1082	2048 x 1088	2048 x 2048	1280 x 1024
Frame rate @ Full resolution	150 fps	114 fps	358 fps	179 fps	938 fps
Max framerate	14770 fps	5500 fps	10204 fps	7740 fps	40000 fps
Pixel pitch	10.6 µm	8 µm	5.5 µm	5.5 µm	6.6 µm
Full well capacity	200 ke⁻	90 ke⁻	11 ke⁻	11 ke⁻	17 ke⁻
SNR	447 : 1	300 : 1	105 : 1	105 : 1	130 : 1
Dynamic Range	120 dB	120 dB	60 dB	60 dB	57 dB
LinLog®	✓	✓	✗	✗	✗
Dual line detection	✗	✗	✓	✓	✗
Automatic Moving ROI	✗	✗	✓	✓	✗
Scheimflug adapter	✗	✗	✓	✗	✗
Interface	CL / GigE	GigE	GigE	GigE	GigE
AB Trigger	✓	✓	✓	✓	✓

LinLog® = The patented LinLog® technology is unique to Photonfocus sensors, allowing for a high dynamic range, designed for demanding and changing light environments such as in welding inspection, where other technologies fail to deliver high quality images.