

# Machine Vision Microscope

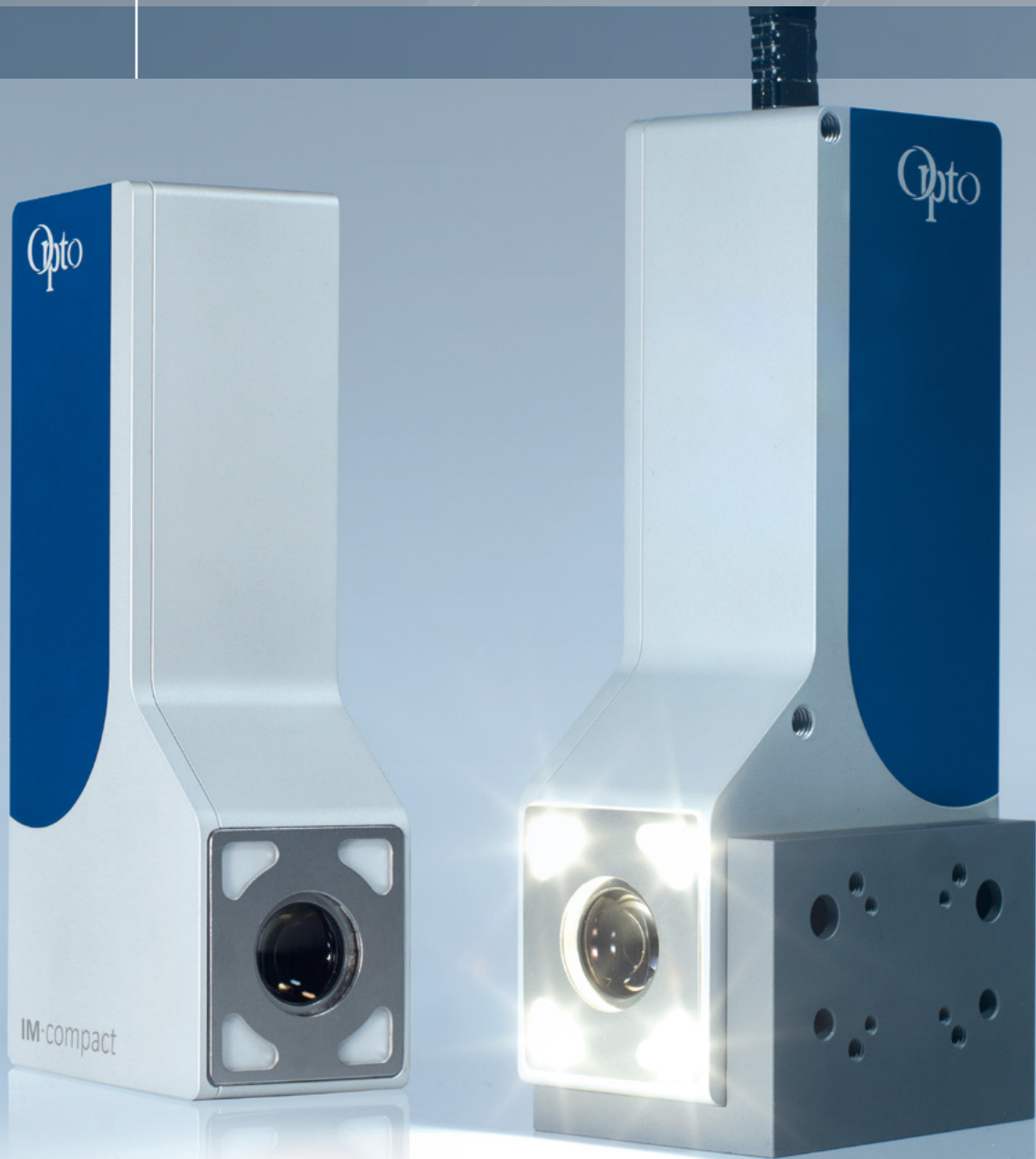
## IM-series digital microscope

- for measuring instruments, analysis systems or bio-imaging systems
- camera with integrated optics + light
- brightfield + darkfield in one unit
- plug and play with measurement software
- robust, one wire, aluminium housing
- USB 3.1 with Sony IMX pregius sensor
- long WD, high NA objectives for highest contrast + resolution



IM·compact

Designed, manufactured and tested in  
Germany to the highest optical standards.



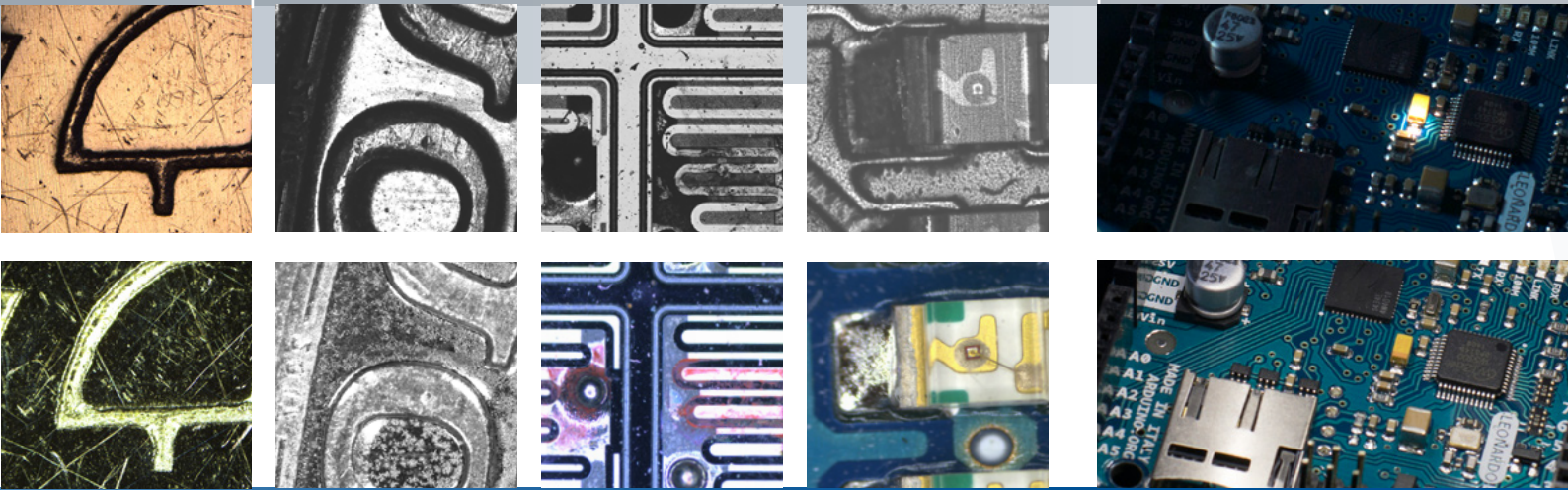
original product size  
shown with optional mounting bracket



One Unit  
One Wire  
Plug and Play

top row: brightfield / coaxial LED  
bottom row: darkfield / ringlight LED

alternating operation  
ring light / coax light



## Digital Microscope

The Machine Vision Microscope is part of the Imaging Module family in the 90° IM·compact M design and sturdy aluminum housing, with a single connection (Plug&Play). Imaging modules are cameras with integrated optics, illumination and electronics for a specific application at the same or lower price than a combination of standard components. They are not only more robust and better adapted to the application, but also ensure the same configuration when re-ordered.

A coaxial incident light illumination and a diffuse ringlight were installed in this module.

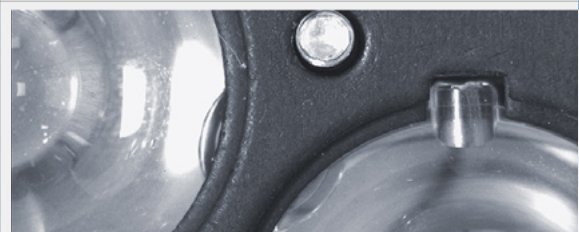
Both lights are controlled and powered via the USB 3.1 port of the integrated camera. A specially developed control electronics allows alternating operation of the two light sources. The interaction of a highly sensitive sensor and very efficient LEDs with a powerful optical system allows this compact combination.

## Opto Viewer

A very intuitive measurement and labeling software is integrated for stand alone applications as well as a comprehensive camera control for demanding integration tasks. Since each module is unchangeable in magnification, it is pre-calibrated at the factory and the settings are stored in its own electronics, so that measurements can be taken immediately.

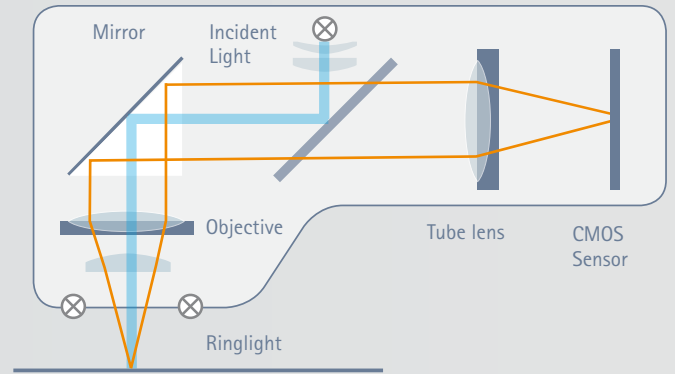
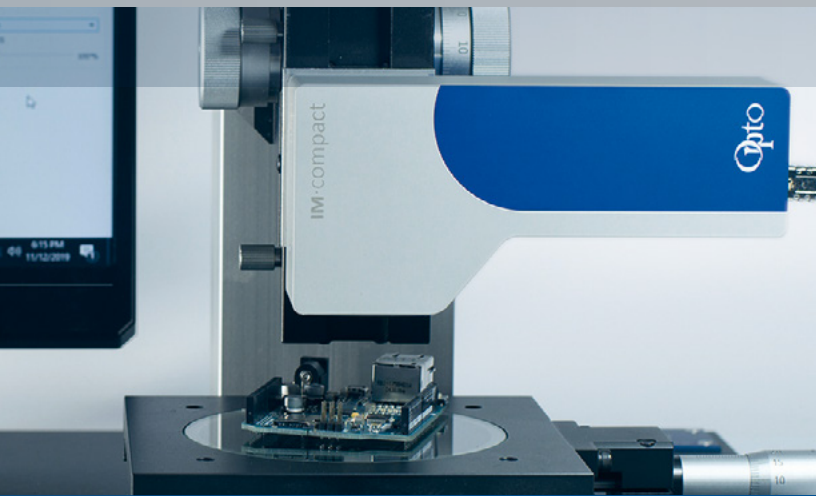
For OEM-Integration of the Opto Imaging Module we offer dedected SW services for Image Analysis, design user interface and statistical data-analysis.

Image Capture with reduced Simplicity  
Start | Stop | Save | Brightness



IM·series countless variations





## Technical Specifications

FoV (mm)	WD (mm)	Resolution (LP/mm)	Numerical aperture (NA)	Light (LED white)	Image	Frame-rate	Sensor (Sony Pregius *)	Interface	Order-number
4,5 x 3,4	31	270	0.1	coax + ring	color	36	5.0 MP   IMX264	USB 3.1	IC - 4352701UCE
4,5 x 3,4	31	270	0.1	coax + ring	monochrome	36	5.0 MP   IMX264	USB 3.1	IC - 4352701UBE
3,8 x 2,8	31	270	0.1	coax + ring	color	55	3.1 MP   IMX265	USB 3.1	IC - 4351701UCE
3,8 x 2,8	31	270	0.1	coax + ring	monochrome	55	3.1 MP   IMX265	USB 3.1	IC - 4351701UBE
2.2 x 1.8	36	555	0.2	coax + ring	color	36	5.0 MP   IMX264	USB 3.1	IC - 4352702UCE
2.2 x 1.8	36	555	0.2	coax + ring	monochrome	36	5.0 MP   IMX264	USB 3.1	IC - 4352702UBE
1.8 x 1.4	36	555	0.2	coax + ring	color	55	3.1 MP   IMX265	USB 3.1	IC - 4351702UCE
1.8 x 1.4	36	555	0.2	coax + ring	monochrome	55	3.1 MP   IMX265	USB 3.1	IC - 4351702UBE
1,8 x 1,4	13	555	0.25	coax	color	55	3.1 MP   IMX265	USB 3.1	IC - 4251101UCE *
1,8 x 1,4	13	555	0.25	coax	monochrome	55	3.1 MP   IMX265	USB 3.1	IC - 4251101UBE *

Dimensions: 70 x 150 x 40 mm, 0,5 kg

\* 88 x 150 x 40 mm, 0,5 kg

Conformity: CE / RoHS / WEEE

200120

**Opto GmbH**  
 Lochhamer Schlag 14  
 82166 Gräfelfing  
 Munich, Germany

+49 89 89 80 550  
 info@opto.de  
 www.opto.de