

micro vision systems by optikron



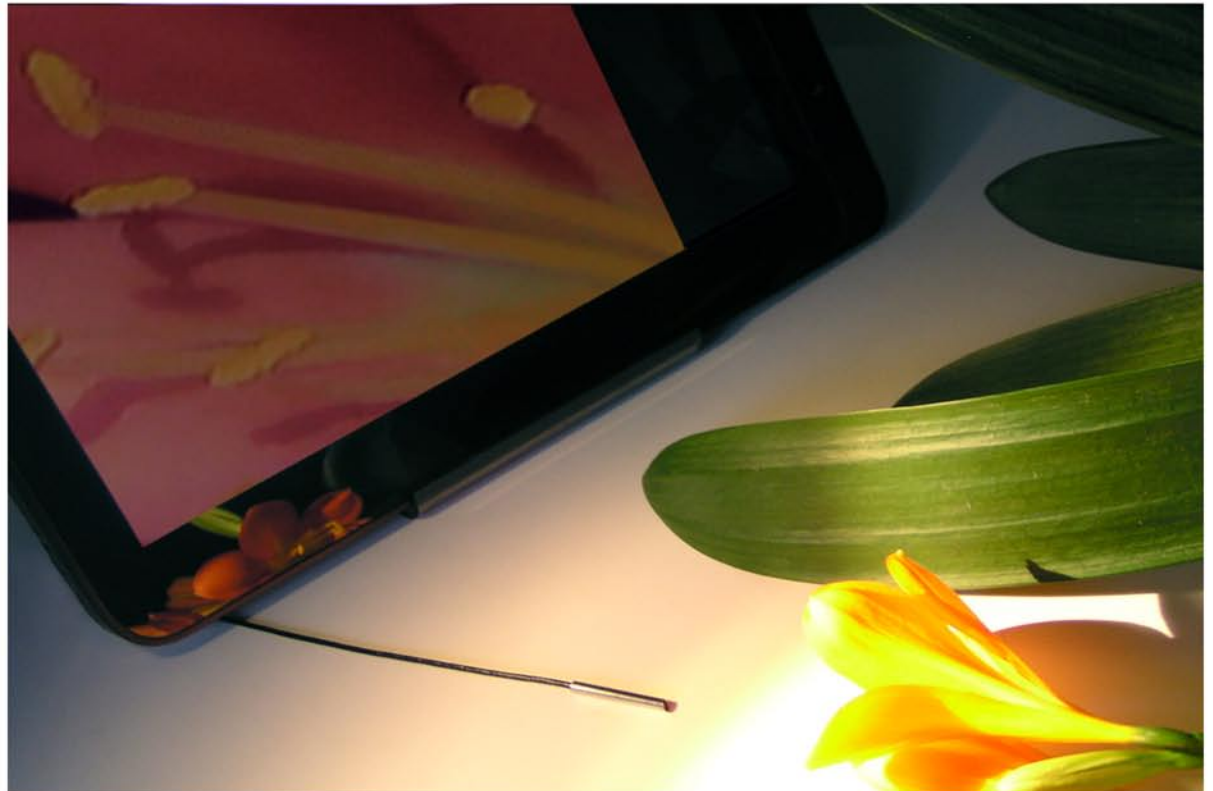
Optikron's micro cameras and vision systems are optimized for applications in which it is important to have imaging systems with smallest sizes in combination with highest image quality. In these miniaturized modules are used smallest sensors together with special optics which are designed for getting the best view of your objects. The cameras are very light-sensitive and have an outstanding performance by the optimal combination of electronics, optics and mechanical parts. All micro cameras can be integrated into complex systems or can be used as stand-alone devices. Additionally to our standard cameras are customized modules and the development and manufacturing of individual vision systems available as well. Key applications for these solutions are endoscopy, microscopy, machine vision, automation, metrology and inspection, bioscience and analytics and many more.

optikron micro-cams

Optikron Vision GmbH
Jena, Germany
www.optikron.de

micro vision systems

by optikron



Ø2.75x24 mm (stainless steel tube)

1/10" CMOS sensor 400x400 px.

USB (UVC) or CVBS

multi-element lenses for optimized
image quality and highest DOF

standard and customized modules

key application:

endoscopy, life science, automation,
machine vision, technical inspection



Optikron's s-series camera modules have very small dimensions for a high miniaturization. With their optimally designed and matched optics and electronics for these small sensors have these modules an impressive image quality. The available standard optics are generating an outstanding high depth of field and because of the high light-sensitivity of the sensor these cameras can be also used in surroundings with lower light conditions. There is additionally a NIR version available. The camera will switch automatically to b/w mode, if illumination changes to an NIR light sources.

optikron s-series

Optikron Vision GmbH
Jena, Germany
www.optikron.de

micro vision systems by optikron



M-Series cameras have resolutions of 480p, 720p, 1080p and 5MP

Rolling Shutter and Global Shutter versions
color and black/white sensors

modules with USB a and USB C
and with 0° and 90° view

key application:

automation, metrology, inspection,
bioscience, microscopy, medical



Optikron's m-series camera modules are versatile, small and available with a wide variety of optics and housings for an easy integration.

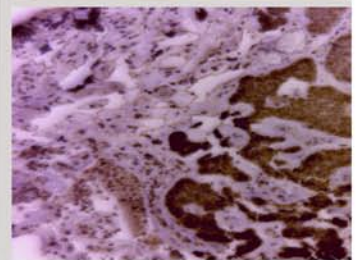
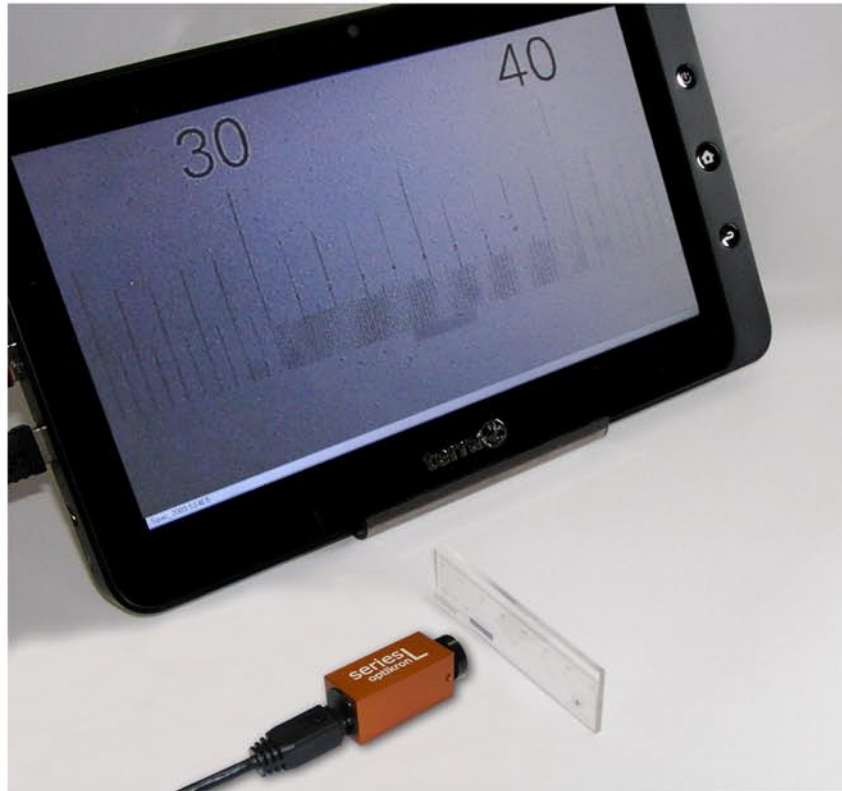
The M-series modules are the smallest cameras with VGA, HD or Full HD or 5MP resolution.

They are often the basis for customized vision systems of a higher complexity. Additionally with our M-Series GS cameras are small global shutter cameras available. Optionally we provide modules with integrated LEDs or add-on illumination units. Highlights are the optimized lenses for various applications. M-Series cameras are also available for a use as smallest video microscopes.

optikron m-series

Optikron Vision GmbH
Jena, Germany
www.optikron.de

micro vision systems by optikron



L-series 5MP USB (1/4")
16x16x35 mm

with snapshot-switch
and trigger input available

L-series 8MP USB (1/3,2")
20x20x40 mm / 22x22x40

L-series 1080p HDMI (1/2,9")
20x20x60 mm

key application:

machine vision, metrology, inspection,
bioscience, analytics, microscopy

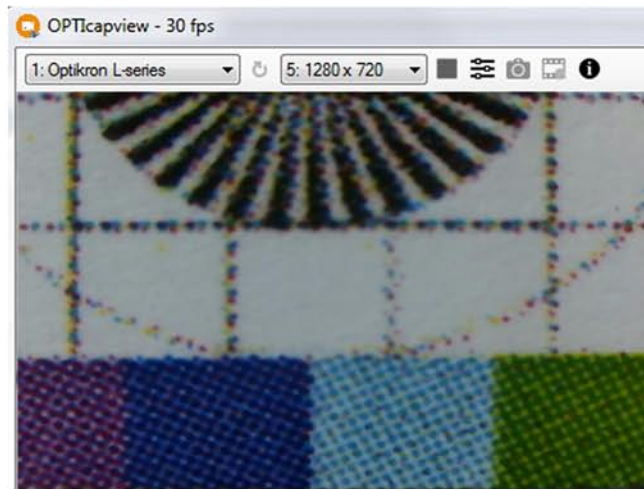


Because of their high resolution, high light-sensitivity and fast auto adjustments are these small cameras very versatile regarding their application. They show a very high performance in different working surroundings. The L-series cameras can be simply integrated into complex systems, like machines, robots, automation systems. Also they can be used as stand-alone device like a digital microscope or for process control or for assembling and inspection. For the L-series cameras are several accessories available, such as illumination units, mounts, adapters for different standard lenses and lens-tube extensions.

optikron L-series

Optikron Vision GmbH
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www.optikron.de

micro vision systems by optikron



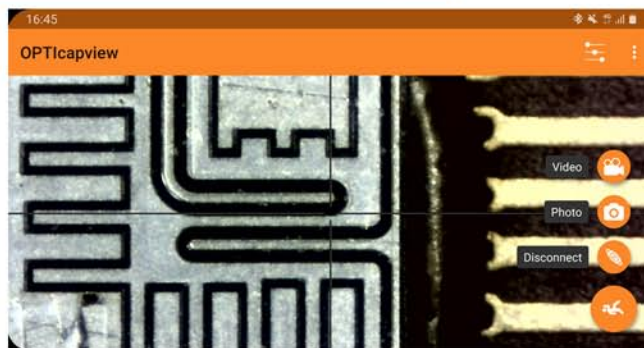
OPTIcapview for Windows

All Optikron micro-cameras with USB interface are UVC devices. There are no special drivers required. The cameras can be easily connected to Windows or Linux PC's and tablets and can be also used on RaspberryPi. By this standard it is easy to integrate the cam's into already existing software solutions or use them with our viewer software.

OPTIcapview is our freeware viewer software optimized for a simple use of Optikron's micro-cameras.

Functions:

live video view, image settings, resolution setting, crosshair and customized overlays, screen mirroring, switching between different cameras, frame rate information, snapshot, video recording



OPTIcapview App for Android

With this Android App can be used our micro-cameras also with mobile devices. With tablets or smartphones can be generated compact systems for mobile use and applications like on-site inspection or for a simple integration into machines. All our USB cameras can be connected via an OTG adaptor to such Android devices. Some of our camera modules are additionally available as OTG version for a direct use at mobile devices. So our cameras can be also used in a flexible way at several places as high efficient tool in quality inspection, production, process control, assembling, analytics, microscopy and documentation.

Functions:

live video view, image settings, resolution setting, adjustable crosshair as overlay, screen mirroring, magnification, snapshot, video recording

software

micro vision systems by optikron



overview standard cameras

Micro Cameras 2026/2027

Item	Item No.
XS-series	
XS-series USB A, Ø 1.8	82-0001-01
S-series	
S-series USB A, Ø 2.75 inox	83-0001-01
S-series CVBS Ø 2.75 inox	83-0101-01
M-series	
M-series CVBS, 0°, 10x10x14, compact HQ lens	84-0001-02
M-series CVBS, 0°, Ø16, S-Mount lens	84-0001-03
M-series VGA, USB A, 0°, Ø5.95	84-0006-01
M-series VGA, USB A, 0°, LED, Ø5.95	84-0007-01
M-series VGA MIC, USB A, 0°, Ø6.5	84-0006-02
M-series VGA MIC, USB A, 0°, LED, Ø10	84-0006-03
M-series HD 720p comp.USB C, 0°, Ø3.6	84-0013-03
M-Series 720p bw USB A, adj. lens, 0°, Ø4.2	84-0013-13
M-Series 720p USB A, 0°, LED, Ø4.2	84-0013-05
M-Series 720p USB C, 0°, LED, Ø4.2	84-0013-07
M-series HD 720p USB C, 90°, 5x5x16	84-9013-01
M-series 1080p compact USB C, 0°, Ø4.8	84-0020-02
M-series 1080p USB A, 0°, 6.5x6.5x30	84-0021-01
M-series 1080p USB A, round, 0°, Ø6.5x30	84-0023-01
M-series 1080p USB C, round, 0°, Ø6.5x30	84-0023-02
M-series 1080p MIC USB A, round, 0°, Ø6.5x30	84-0023-11
M-series 1080p USB A, 90°, 10x6x30	84-9021-01
M-series 1080p USB C, 90°, 10x6x30	84-9021-02
M-series 1080p 60 fps USB A, round, 0°, Ø6.5x14	84-0026-01
M-series 1080p 60 fps USB A, 0°, 6.5x6.5x14	84-0027-01
M-series 1080p 60 fps USB A, 90°, 10x6x30	84-9022-01
M-series 1080p 60 fps USB A, 0°, LED, Ø10x14	84-0028-01
M-series VGA Global Shutter (GS) b/w USB A, 90°, 10x6x30	84-9031-01
M-series 720p Global Shutter (GS) 60 fps, USB A, 0°, 10x10x14	84-0032-01
M-series 720p Global Shutter (GS) 60 fps, USB A, 0°, Ø16, S-Mount	84-0032-02
M-series HD b/w 720p Global Shutter (GS) 120 fps, USB A, 0°, Ø10	84-0033-01
M-series SMP USB A, round, 0°, Ø6.5x30	84-0041-01
M-series SMP USB A, 0°, 6.5x6.5x30	84-0042-01
M-series SMP USB A, 90°, 10x6x30	84-9041-01
M-series 5 MP Cube USB C, 10x10x10	84-0051-01
M-series 5MP MIC, USB A, 0°, Ø10	84-0042-31
L-series	
L-series 5 MP USB, 16x16x35	85-0001-01
L-series 5 MP Cube USB, 16x16x16, S-Mount	85-0002-01
L-series 8 MP USB PRO, 20x20x40	85-0011-01
L-series 8 MP USB, standard with fixed cable, 22x22x40	85-0011-02
L-series 1080p Global Shutter (GS) 60 fps, 0°, Ø17, S-Mount	85-0021-01
L-series HDMI, 20x20x60	85-0901-01
Smart Cams	
Smart S CVBS, 90° view, LED, 6x6x16	83-0000-01
Smart M HD 720p USB A, 0°, LED, Ø4.8	84-0000-01
Smart M HD 720p USB C, 0°, LED, Ø4.8	84-0000-02
Smart M HD 1080p USB C, 0°, Ø6.5	84-0000-11
Smart L 5 MP USB A, 0°, Ø17, S-mount	85-0000-01
accessories for cameras with S-Mount	
lenses for M-Series and L-Series cameras	

micro vision systems by optikron



technical data

camera type	item no.
XS-series USB Ø 1.8, FOV ~ 120°	82-0001-01
	
Specification	
Size of standard housing	Ø1.8x12 mm, stainless steel
Standard cable	approx. 50 cm cable from camera to controller-board, then approx. 1 m USB-cable (can be extended)
Resolution and max. frame rate	400 x 380 / 30fps.
Image sensor	1/18" CMOS Color
Image area	0.741 x 0.707 mm
Pixel size	1.75 x 1.75 µm
Shutter type	Rolling Shutter
Dynamic range	67.1 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V via USB
Power current	120 mA max. (DC 5 V)
LED Illumination	no
Miscellaneous	
Lens	FOV ~120°

micro vision systems by optikron



technical data

camera type	item no.
S-series USB Ø 2.75 inox, FOV ~ 120°	83-0001-01
	
Specification	
Size of standard housing	Ø2.75 x 22 mm
Standard cable	approx. 80 cm cable (up to 200 cm upon request) from camera to controller-board, then approx. 1 m USB-cable
Resolution and max. frame rate	400 x 400
Image sensor	1/10" CMOS Color
Image area	1.224 x 1.212 mm
Pixel size	3.0 x 3.0 µm
Shutter type	Rolling Shutter
S/N Ratio	> 50 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V via USB
Power current	200 mA max. (DC 5 V)
LED Illumination	no
Miscellaneous	customized housings available
Lens	FOV ~120° or customized lens upon request IR-cut filter (optional without IR-cut)

micro vision systems by optikron



technical data

camera type	item no.
S-series CVBS Ø 2.75 inox, FOV ~ 120°	83-0101-01
	
Specification	
Size of standard housing	Ø2.75 x 22 mm
Standard cable	approx. 80 cm cable (up to 200 cm upon request) from camera to controller-board, then approx. 100 cm cable with RCA female for video out and DC plug female for power input
Resolution and max. frame rate	400 x 400
Image sensor	1/10" CMOS Color
Image area	1.224 x 1.212 mm
Pixel size	3.0 x 3.0 µm
Shutter type	Rolling Shutter
S/N Ratio	> 50 dB
UVC format	-
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	CVBS
Power source	DC 5 ~ 12 V (ext.)
Power current	200 mA max.
LED Illumination	no
Miscellaneous	customized housings available
Lens	FOV ~120° or customized lens upon request IR-cut filter (optional without IR-cut)

micro vision systems by optikron



technical data

camera type	item no.
M-series CVBS, 0°, HQ lens	84-0001-02
M-series CVBS, 0°, S-Mount lens	84-0001-03

		Specification
Size of standard housing	10 x 10 x 14 mm with HQ lens M5.5 Ø16 x 20 mm with S-Mount	
Standard cable	after approx. 50 cm splitting into video out RCA (chinch) & power input DC Plug female (DC 5~12 V)	
Resolution and max. frame rate	648 x 488 (NTSC or PAL) 60 (NTSC) / 50 (PAL) fields/sec.	
Image sensor	1/4" CMOS Color	
Image area	3.63 x 2.73 mm	
Pixel size	5.6 x 5.6 µm	
Shutter type	Rolling Shutter	
Dynamic range	62 dB	
UVC format	-	
Storage temperature	- 30 to 60 Degree C	
Working temperatur	- 10 to 45 Degree C	
Interface	CVBS	
Power source	DC 5 ~ 12 V (DC plug 2.1/5.5)	
Power current	90 mA max	
LED Illumination	no	
Miscellaneous	customized housings and integrated LED illumination available upon request	
Lens	84-0001-02 with HQ lens HFOV ~40° or ~60°, various lenses availbale 84-0001-03 various S-Mount - lenses available	

micro vision systems by optikron



technical data

camera type	item no.
M-series VGA, USB, 0° view	84-0006-01
	
Specification	
Size of standard housing	Ø5.95 x 8 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	640 x 480 /30 fps 352 x 288 /30 fps 320 x 240 /30 fps 160 x 120 /30 fps
Image sensor	1/9" CMOS Color
Image area	1.6 x 1.2 mm
Pixel size	2.5 x 2.5 µm
Shutter type	Rolling Shutter
Dynamic range	73 dB
UVC format	MJPEG
Storage temperature	- 25 to 60 Degree C
Working temperatur	0 to 50 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	60 mA max
LED Illumination	no
Miscellaneous	customized housings available
Lens	lens adjustable (HFOV ~60° in standard), customized lenses upon request

micro vision systems by optikron



technical data

camera type	item no.
M-series VGA, USB, 0° view, LED	84-0007-01
	
Specification	
Size of standard housing	Ø5.95 x 8 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	640 x 480 /30 fps 352 x 288 /30 fps 320 x 240 /30 fps 160 x 120 /30 fps
Image sensor	1/9" CMOS Color
Image area	1.6 x 1.2 mm
Pixel size	2.5 x 2.5 µm
Shutter type	Rolling Shutter
Dynamic range	73 dB
UVC format	MJPEG
Storage temperature	- 25 to 60 Degree C
Working temperatur	0 to 50 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	170 mA-max
LED Illumination	White LED x 6, dimmable
Miscellaneous	customized housings available
Lens	lens fixed (HFOV ~60°), customized lenses upon request

micro vision systems by optikron



technical data

camera type	item no.
M-series VGA MIC, USB, 0° view	84-0006-02
	
Specification	
Size of standard housing	Ø6.5 x 12 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	640 x 480 /30 fps 352 x 288 /30 fps 320 x 240 /30 fps 160 x 120 /30 fps
Image sensor	1/9" CMOS Color
Image area	1.6 x 1.2 mm
Pixel size	2.5 x 2.5 µm
Shutter type	Rolling Shutter
Dynamic range	73 dB
UVC format	MJPEG
Storage temperature	- 25 to 60 Degree C
Working temperatur	0 to 50 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	170 mA max
LED Illumination	no
Miscellaneous	customized housings available
Lens	adjustable lens FOV ~22° (f5.0), customized lenses upon request

micro vision systems by optikron



technical data

camera type	item no.
M-series VGA MIC, USB, 0° view, LED	84-0006-03
	
Specification	
Size of standard housing	Ø10 x 14 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	640 x 480 /30 fps 352 x 288 /30 fps 320 x 240 /30 fps 160 x 120 /30 fps
Image sensor	1/9" CMOS Color
Image area	1.6 x 1.2 mm
Pixel size	2.5 x 2.5 µm
Shutter type	Rolling Shutter
Dynamic range	73 dB
UVC format	MJPEG
Storage temperature	- 25 to 60 Degree C
Working temperatur	0 to 50 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	190 mA max
LED Illumination	White LED x 6, dimmable
Miscellaneous	customized housings available
Lens	adjustable lens FOV ~22° (f5.0), customized lenses upon request

micro vision systems by optikron



technical data

camera type	item no.
M-series HD 720p comp.USB C, 0°	84-0013-03
	
Specification	
Size of standard housing	Ø3.6 x 14 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type C
Resolution and max. frame rate	1280 x 720 / 30 fps 640 x 480 / 30 fps 320 x 240 / 30 fps
Image sensor	1/11" CMOS Color / bw
Image area	1.43 x 0.810 mm
Pixel size	1.12 x 1.12 µm
Shutter type	Rolling Shutter
Dynamic range	64.6 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB C (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	160 mA max.
LED Illumination	no
Miscellaneous	customized housings available upon request
Lens	HFOV ~70°, fixed lens

micro vision systems by optikron



technical data

camera type	item no.
M-Series 720p bw USB A, adj. lens, 0°	84-0013-13
M-Series 720p USB A, 0°, LED	84-0013-05
M-Series 720p USB-C, 0°, LED	84-0013-07

		Specification
Size of standard housing	Ø 4.2 x 17 mm	
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A => LED dimmer switch at the cable	
Resolution and max. frame rate	1280 x 720 / 30 fps 640 x 480 / 30 fps	
Image sensor	1/9" CMOS Color / bw	
Image area	1.819 x 1.033 mm	
Pixel size	1.4 x 1.4 µm	
Shutter type	Rolling Shutter	
Dynamic range	68.4dB	
UVC format	MJPEG	
Storage temperature	- 30 to 60 Degree C	
Working temperatur	- 10 to 45 Degree C	
Interface	USB 2.0 (UVC => driver free) USB C -> 84-0013-07	
Power source	DC 5 V (via USB)	
Power current	170 mA max.	
LED Illumination	White LED (dimnable) at 84-0013-05 and 84-0013-07	
Miscellaneous		
Lens	HFOV ~65°	

micro vision systems by optikron



technical data

camera type	item no.
M-series HD 720p USB C, 90°	84-9013-01
	
Specification	
Size of standard housing	5 x 5 x 16 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type C
Resolution and max. frame rate	1280 x 720 /30 fps 640 x 480 /30 fps
Image sensor	1/9" CMOS Color
Image area	1.82 x 1.03 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	68.4dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB C (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	120 mA max.
LED Illumination	no
Miscellaneous	
Lens	HFOV ~65°, fixed lens

micro vision systems by optikron



technical data

camera type	item no.
M-series 1080p compact USB C, 0°	84-0020-02
	
Specification	
Size of standard housing	Ø 4.8 x 14 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type C
Resolution and max. frame rate	1920 x 1080 / 30 fps 1280 x 720 / 30 fps 640 x 480 / 30 fps
Image sensor	1/7.25" CMOS Color
Image area	2.160 x 1.220 mm
Pixel size	1.116 x 1.116 µm
Shutter type	Rolling Shutter
Dynamic range	72.2 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB C (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	160 mA max.
LED Illumination	no
Miscellaneous	
Lens	HFOV ~45°, lens adjustable, other lenses upon request

micro vision systems by optikron



technical data

camera type	item no.
M-series 1080p USB A, 0°	84-0021-01
M-series 1080p USB A, round, 0°	84-0023-01
M-series 1080p USB C, round, 0°	84-0023-02
M-series 1080p MIC USB A, round, 0°	84-0023-11
M-series 1080p USB A, 90°	84-9021-01
M-series 1080p USB C, 90°	84-9021-02



Specification

Size of standard housing	0° type => Ø6.5x30 or 6.5x6.5x30 mm; 90° type => 10x6x30 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A or C
Resolution and max. frame rate	1920 x 1080 /30 fps 1280 x 720 /30 fps 640 x 480 /30 fps
Image sensor	1/6" CMOS Color
Image area	2.728 x 1.549 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	73.3 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 or USB C (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	160 mA max.
LED Illumination	no
Miscellaneous	customized housings and integrated LEDs available upon request
Lens	lens adjustable HFOV ~68° as standard; version "MIC" for higher magnification with FOV ~30°; other lenses available

micro vision systems by optikron



technical data

camera type	item no.
M-series 1080p 60 fps USB, round, 0°	84-0026-01
M-series 1080p 60 fps USB, 0°	84-0027-01
M-series 1080p 60 fps USB, 90°	84-9022-01



Specification

Size of standard housing	0° view modules => Ø6.5x14 mm or 6.5x6.5x14 mm with adjustable lenses, 90° view module => 10x6x30 mm (18 mm length as option)
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	1920 x 1080 /60 fps 1280 x 720 /60 fps 640 x 480 /60 fps
Image sensor	1/6" CMOS Color
Image area	2.728 x 1.549 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	73.3 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 3.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	160 mA max.
LED Illumination	no
Miscellaneous	customized housings and integrated LED illumination available upon request
Lens	lens adjustable HFOV ~68°, other lenses upon request

micro vision systems by optikron



technical data

camera type

item no.

M-series 1080p 60 USB, 0°, LED

84-0028-01



Specification

Size of standard housing	Ø10 x 14 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	1920 x 1080 /60 fps 1280 x 720 /60 fps 640 x 480 /60 fps
Image sensor	1/6" CMOS Color
Image area	2.728 x 1.549 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	73.3 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 3.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	190 mA
LED Illumination	White LED x 6, dimmable
Miscellaneous	customized housings upon request
Lens	lens adjustable HFOV ~68°, other lenses upon request

micro vision systems by optikron



technical data

camera type	item no.
M-series VGA GS b/w USB, 90°	84-9031-01
	
Specification	
Size of standard housing	90° view module => 10 x 6 x 30 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	640 x 480 / 30 fps
Image sensor	1/7.5" CMOS Color (black/white)
Image area	1.968 x 1.488 mm
Pixel size	3 x 3 µm
Shutter type	Global Shutter
Dynamic range	73.3 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	160 mA
LED Illumination	no
Miscellaneous	customized housings and integrated LED illumination available upon request
Lens	lens adjustable, standard HFOV ~55° various other lenses availbale (for example HFOV ~30°, ~45° or ~65°)

micro vision systems by optikron



technical data

camera type	item no.
M-series 720p GS 60 fps, 0°, HQ lens	84-0032-01
M-series 720p GS 60 fps, 0°, S-Mount	84-0032-02

		Specification
Size of standard housing	10 x 10 x 14 mm with HQ lens M5.5 Ø16 x 20 mm with S-Mount lens	
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A	
Resolution and max. frame rate	1280 x 720 /60 fps 640 x 480 /60 fps 320 x 240 /60 fps	
Image sensor	1/4.1" CMOS Color	
Image area	3.84 x 2.16 mm	
Pixel size	3.0 x 3.0 µm	
Shutter type	Global Shutter	
Dynamic range	63.9 dB	
UVC format	MJPEG	
Storage temperature	- 30 to 60 Degree C	
Working temperatur	- 10 to 45 Degree C	
Interface	USB 3.0 (UVC => driver free)	
Power source	DC 5 V (via USB)	
Power current	210 mA max.	
LED Illumination	no	
Miscellaneous		
Lens	84-0032-01 with various compact HQ lenses (HFOV ~40°, ~58° or ~80°) 84-0032-02 various S-Mount - lenses available	

micro vision systems by optikron



technical data

camera type	item no.
M-series HD b/w 720p GS 120, USB, 0°	84-0033-01
	
Specification	
Size of standard housing	Ø10 x 20 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	1280 x 720 /120 fps 640 x 480 /120 fps 640 x 400 /240 fps
Image sensor	1/4" CMOS b/w
Image area	3.89 x 2.45 mm
Pixel size	3.0 x 3.0 µm
Shutter type	Global Shutter
Dynamic range	68 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 3.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	270 mA max.
LED Illumination	no
Miscellaneous	customized housings available
Lens	various lenses available, adjustable in M9x0.5 lens tube

micro vision systems by optikron



technical data

camera type	item no.
M-series 5MP USB, round, 0°	84-0041-01
M-series 5MP USB, 0°	84-0042-01
M-series 5MP USB, 90°	84-9041-01



Specification

Size of standard housing	0° type => Ø6.5x30 or 6.5x6.5x30 mm; 90° type => 10x6x30 mm compact version for 0° type with Ø6.5x14 mm as option
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	2592 x 1944 /24 fps 1920 x 1080 /24 fps 1600 x 1200 /24 fps 1280 x 720 /24 fps 640 x 480 /24 fps
Image sensor	1/5" CMOS Color
Image area	2.90 x 2.18 mm
Pixel size	1.12 x 1.12 µm
Shutter type	Rolling Shutter
Dynamic range	64.7 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	120 mA max.
LED Illumination	no
Miscellaneous	customized housings and integrated LEDs available upon request
Lens	with various HQ lenses (HFOV ~32°, ~45° or ~70°); other lenses available

micro vision systems by optikron



technical data

camera type	item no.
M-series 5 MP Cube USB C	84-0051-01
	
Specification	
Size of standard housing	10 x 10 x 10 mm (without lens)
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB C
Resolution and max. frame rate	2592 x 1944 /30 fps 1920 x 1080 /30 fps 1280 x 720 /30 fps 640 x 480 /30 fps
Image sensor	1/4" CMOS Color
Image area	3.674 x 2.738 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	68 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB C (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	200 mA max.
LED Illumination	no
Miscellaneous	
Lens	compact lenses; optional M9 lens tube as add on for HQ lenses M9

micro vision systems by optikron



technical data

camera type	item no.
M-series 5MP MIC, USB, 0°	84-0042-31
	
Specification	
Size of standard housing	Ø10 x 42 mm (without lens) for M9x0.5 mm lenses, 6.5x6.5 rear housing part; housing made of stainless steel
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	2592 x 1944 /24 fps 1920 x 1080 /24 fps 1600 x 1200 /24 fps 1280 x 720 /24 fps 640 x 480 /24 fps
Image sensor	1/5" CMOS Color
Image area	2.90 x 2.18 mm
Pixel size	1.12 x 1.12 µm
Shutter type	Rolling Shutter
Dynamic range	64.7 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	120 mA max.
LED Illumination	no
Miscellaneous	Ø10 x 42 mm complete cylindrical housing as option; customized housings available
Lens	various lenses available, adjustable in M9x0.5 lens tube (e.g. f3.6, f6.6, f10, f15.1)

micro vision systems by optikron



technical data

camera type	item no.
L-series 5 MP USB	85-0001-01
 Specification	
Size of standard housing	16x16x35 mm (without lens)
Standard cable	USB cable ~ 1.8 m (or ~ 5 m as option) Micro USB (type B) connector to camera with 3.8V DC out/ USB type A to PC with 5V DC in => special cable for DC out of 3.8V
Resolution and max. frame rate	2592 x 1944 /10 fps 1920 x 1080 /30 fps 1280 x 720 /30 fps 640 x 480 /30 fps
Image sensor	1/4" CMOS Color
Image area	3.651 x 2.744 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	63 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	170 mA
LED Illumination	no
Miscellaneous	
Lens	various S-Mount - lenses availbale

micro vision systems by optikron



technical data

camera type	item no.
L-series 5 MP Cube USB, S-Mount	85-0002-01
	
Specification	
Size of standard housing	16 x 16 x 16 mm (without lens)
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	2592 x 1944 /24 fps 1920 x 1080 /24 fps 1600 x 1200 /24 fps 1280 x 720 /24 fps 640 x 480 /24 fps
Image sensor	1/5" CMOS Color
Image area	2.90 x 2.18 mm
Pixel size	1.12 x 1.12 µm
Shutter type	Rolling Shutter
Dynamic range	64.7 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	120 mA max.
LED Illumination	no
Miscellaneous	
Lens	various S-Mount - lenses availbale

micro vision systems by optikron



technical data

camera type	item no.
L-series 8 MP USB PRO	85-0011-01
L-series 8 MP USB, stdn. fixed cable	85-0011-02
 Specification	
Size of standard housing	PRO version 20x20x40 mm, stdn. with fixed cable 22x22x40 mm, (without lens)
Standard cable	USB cable ~ 1.8 m (or ~ 5 m as option), PRO with removeable cable, Micro USB (type B) connector to camera / USB (type A) to PC
Resolution and max. frame rate	3264 x 2448 /20 fps 2592 x 1944 /20fps 2048 x 1536 /20 fps 1920 x 1080 /25 fps 1280 x 720 /30 fps 1024 x 768 /30 fps
Image sensor	1/3.2" CMOS Color
Image area	4.59 x 3.45 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	72.5 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	170 mA max.
LED Illumination	no
Miscellaneous	
Lens	various S-Mount - lenses available

micro vision systems by optikron



technical data

camera type	item no.
L-series 1080p GS 60 fps, 0°, S-Mount	85-0021-01
	
Specification	
Size of standard housing	Ø 17 x 42 mm (without lens)
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	1920 x 1080 /60 fps 1280 x 720 /60 fps 640 x 480 /60 fps
Image sensor	1/2.7" CMOS color
Image area	5.76 x 3.24 mm
Pixel size	3.0 x 3.0 µm
Shutter type	Global Shutter
Dynamic range	71.4 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 3.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	tbd
LED Illumination	no
Miscellaneous	
Lens	various S-Mount - lenses available

micro vision systems by optikron



technical data

camera type	item no.
L-series HDMI	85-0901-01
 Specification	
Size of standard housing	20 x 20 x 60 mm (without lens)
Standard cable	HDMI type D + power cable (~80 cm)
Resolution and max. frame rate	1920 x 1080 /30 fps
Image sensor	1/2.9" CMOS Color
Image area	5.51 x 3.1 mm
Pixel size	4.2 x 4.2 µm
Shutter type	Rolling Shutter
Dynamic range	55.1 dB
UVC format	-
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	HDMI D type
Power source	DC 5 ~ 12 V (ext.)
Power current	5V/ 430 mA-max, 12V/180mA-max
LED Illumination	no
Miscellaneous	
Lens	various S-Mount - lenses available

micro vision systems by optikron



technical data

camera type	item no.
Smart S CVBS, 90° view, LEDs	83-0000-01
	
Specification	
Size of standard housing	6 x 6 x 16 mm
Standard cable	approx. 80 cm cable (up to 200 cm upon request) from camera to controller-board, then approx. 100 cm cable with RCA female for video out and DC plug female for power input => LED dimmer switch at the cable
Resolution and max. frame rate	400 x 400
Image sensor	1/10" CMOS Color
Image area	1.224 x 1.212 mm
Pixel size	3.0 x 3.0 µm
Shutter type	Rolling Shutter
S/N Ratio	> 50 dB
UVC format	-
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	CVBS
Power source	DC 5 ~ 12 V
Power current	200 mA max.
LED Illumination	White LED, dimmable
Miscellaneous	
Lens	FOV ~120°, lens fixed

micro vision systems by optikron



technical data

camera type	item no.
Smart M HD 720p USB A, 0°, LEDs	84-0000-01
Smart M HD 720p USB C, 0°, LEDs	84-0000-02



Specification

Size of standard housing	Ø 4.8 x 25 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A or C => LED dimmer switch at the cable
Resolution and max. frame rate	1280 x 720 /30 fps 640 x 480 /30 fps
Image sensor	1/9" CMOS Color
Image area	1.819 x 1.033 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	68.4dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 or USB C (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	170 mA
LED Illumination	White LED, dimmable
Miscellaneous	
Lens	HFOV ~65°, lens fixed

micro vision systems by optikron



technical data

camera type	item no.
Smart M HD 1080p USB C, 0°	84-0000-11
	
Specification	
Size of standard housing	Ø 6.5 x 30 mm
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type C
Resolution and max. frame rate	1920 x 1080 /30 fps 1280 x 720 /30 fps 640 x 480 /30 fps
Image sensor	1/6" CMOS Color
Image area	2.728 x 1.549 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	73.3 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB C (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	160 mA
LED Illumination	no
Miscellaneous	
Lens	FOV ~90°, lens adjustable

micro vision systems by optikron



technical data

camera type	item no.
Smart L 5 MP USB, 0° view, S-mount	85-0000-01
 Specification	
Size of standard housing	Ø 17 x 42 mm (without lens)
Standard cable	approx. 200 cm USB-cable fixed at the camera / USB type A
Resolution and max. frame rate	2592 x 1944 /10 fps 1920 x 1080 /30 fps 1280 x 720 /30 fps 640 x 480 /30 fps
Image sensor	1/4" CMOS Color
Image area	3.651 x 2.744 mm
Pixel size	1.4 x 1.4 µm
Shutter type	Rolling Shutter
Dynamic range	63 dB
UVC format	MJPEG
Storage temperature	- 30 to 60 Degree C
Working temperatur	- 10 to 45 Degree C
Interface	USB 2.0 (UVC => driver free)
Power source	DC 5 V (via USB)
Power current	170 mA max.
LED Illumination	no
Miscellaneous	
Lens	various S-Mount - lenses available