

10. Optical instruments and Microscopes

Microscopy/Stereomicroscopes-Digital microscopes and cameras

1



Greenough-Stereomicroscope Educational-Line OSE



Kern & Sohn

Ideal for workshops, schools and training.

- Tube 45° inclined
 - WF 10x/ Ø 20 mm
 - Diopter adjustment: Both-sided
 - Illumination 1 W LED incident and transmitted
 - Integrated handle and arm curved stand
- Total dimension (W x D x H): 230 x 130 x 300 mm
 Weight: 2.0 kg
 Power supply: 230 V/50 Hz, battery

Type	Description	Magnification	PK	Cat. No.
OSE 421	Binocular	2x / 4x	1	4.666 529
OSE 422	Binocular, rechargeable batteries included	2x / 4x	1	4.666 530

2



6.286 167

Greenough Stereo Microscopes Lab-Line OZL

Kern & Sohn

The flexible all-rounder with zoom function for schools, training companies, inspection authorities and laboratories.

- Tube 45° inclined
- Wide Field WF 10x/20 mm
- Diopter adjustment: Both-sided
- Illumination: 3 W-LED Incident and 3 W-LED transmitted, separately dimmable
- Interpupillary distance 55 to 75 mm
- Large selection of eyepieces, external illumination units as well as auxiliary objectives are available as accessories
- Protective dust cover, eye piece rubber caps, as well as multi-lingual user instructions included in the scope of delivery

Type	Description	Magnification	PK	Cat. No.
OZL 463	Binocular	7x ... 45x	1	6.286 167
OZL 464	Trinocular	7x ... 45x	1	6.286 168

Accessories for Greenough Stereo Microscopes Lab-Line OZL 463/OZL 464

Kern & Sohn

Type	PK	Cat. No.
C-Mount Adapter 0.5x	1	4.657 806
Auxiliary objective 0.5x	1	6.285 902
Auxiliary objective 1.5x	1	6.285 903
Auxiliary objective 2.0x	1	6.285 904

3



Wi-Fi Microscope Camera Moticam X3

Motic

Wireless transfer of microscope images in full HD to smartphones or tablets. Connect mobile devices with the Wi-Fi signal of the camera and up to 6 users are ready to capture, edit and save pictures with the free App MotiConnect.

- Data transfer Wi-Fi (2.4 or 5 GHz) and Ethernet (RJ45)
- Operating System Microsoft Windows XP/Vista/7/8/MAC OSX/Android 4.0 or higher/iOS7 or higher
- External Power Supply (12 V)

Scope of supply: CS Ring Adaptor, Focusable Lens, 30 mm and 38 mm Eyepiece Adapters, USB 2.0 Cable, Calibration Slide, Macro Tube, Motic Images Plus 3.0 for PC/OSX/Linux

Type	Resolution	Sensor format	PK	Cat. No.
Moticam X3	4 MP (1920 x 1080 px or 1280 x 720 px)	1/3" CMOS	1	4.662 164

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Microscope Camera MOTICAM S



Motic

The next generation of Moticams offers solutions for a wide variety of applications in digital microscopy. Compact and robust, equipped with high-quality sCMOS sensors with many different resolutions and fast USB 3.1 connection.

Type	Resolution	Sensor format	PK	Cat. No.
MOTICAM S1	1,2MP (max. 1280 x 950 px)	1/3" sCMOS	1	4.672 118
MOTICAM S3	3MP (max. 2448 x 1536 px)	1/2.8" sCMOS	1	4.672 119
MOTICAM S6	6MP (max. 3072 x 2048 px)	1/1.8" sCMOS	1	4.672 120
MOTICAM Pro S5 Lite	5MP (max. 2448 x 2048 px)	2/3" sCMOS	1	4.672 121

1 2 Microscope Camera Moticam 1080

A multi-output camera with Full-HD resolution. This multifunctional camera with integrated software offers a new quality for interactive microscopy in educational, laboratory and industrial environments and allows working without additional computer. The HDMI signal delivers a fast live image with 1080 (60P) resolution and high color fidelity. Still images and videos are stored either at 2 MP or 8 MP format on MicroSD card. Especially for the visualisation of fast, moving samples in biology and industry 60 full frames per second are ideal system preconditions. The on-board software is controlled via WiFi mouse. As an alternative, the USB port of the camera can be used, also simultaneously to the HDMI port, to run the camera with the new Motic Images Plus 3.0 software with all its measuring tools. A HDMI video projector allows to present the impressive live image to a greater public. The delivery package includes the software Motic Images Plus 3.0, calibration slide, eyepiece adapters as well as macro tube with focusable lens.

Motic



Type	Resolution	Sensor format	PK	Cat. No.
Moticam 1080	2.0/8 MP	1/2.8" CMOS	1	6.282 488

➔ C-Mount camera adapter please see page 1100.



3 Digital CMOS Microscope Cameras ODC

Specialists in microscopy for measurement, counting, documentation, archiving and image processing.

Kern & Sohn

- C-Mount USB-camera with CMOS sensor
- USB-cable, eyepiece adapter and calibration slide included
- Kern-Microscope-VIS Software in 6 languages inclusive, for WINDOWS XP and higher



Type	Resolution	Sensor format	Interface	PK	Cat. No.
ODC 824	3,1 MP	1/2" CMOS	USB 2.0	1	6.285 783
ODC 825	5,1 MP	1/2.5" CMOS	USB 2.0	1	6.285 906
ODC 831	3,1 MP	1/3" CMOS	USB 3.0	1	6.285 907
ODC 832	5,1 MP	1/2.5" CMOS	USB 3.0	1	6.285 908

USB Hand held microscopes for schools and education

The Dino-Lite microscopes are available for teachers and students for all levels of education. They are suitable for use in science teaching for detailed examination e.g. of insects, plants, minerals, fossils and mechanical and electrical components.

Dino-Lite

- USB 2.0, 30 fps
- VGA (640 x 480) or 1.3 MP image resolution
- WF4115ZT with WLAN streamer
- Incl. Dino-Lite software, for AM4113T and WF4115ZT the software also includes measurement functions
- Warranty: 2 years

Scope of supply: Carrying pouch, Software CD for Windows and Mac OS, calibration sheet for AM4113T and WF4115ZT, manual



6.285 940



4.668 457

Type	Resolution	Magnification	Lighting	PK	Cat. No.
AM2111	640 x 480 pixels	10x ... 70x, 200x	4 x LED, white	1	6.285 940
AM4113T	1.3 MP	10x ... 70x, 200x	8 x LED, white	1	6.285 920
WF4115ZT	1,3 MP	20x ... 220x	8 x LED, white	1	4.668 457

Accessories for USB Hand held microscopes for schools and education

Dino-Lite

Description	PK	Cat. No.
Table stand with vertical orientation	1	4.675 298
Table stand with 30° inclinable pole feature	1	4.675 299
WiFi Streamer for AM4113T	1	6.285 946



4.675 298

6.285 946

➔ More manual microscopes please see chapters 13.