OCM, OZL, OZM, OBE, OIV, OZB, ODC, ORA, ORF, ORM, ORL, OAB

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)<u>279-</u>98-46 Казань (843)206-01-48

Россия +7(495)268-04-70

Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73

Киргизия +996(312)-96-26-47

Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Саранск (8342)22-96-24 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35

Казахстан +7(7172)727-132

Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35 Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Inverse microscope OCM-1

The inverted biological laboratory microscope – also with fluorescence



KERN OCM 161

- The OCM-1 range stands out through its design which is ergonomic, robust and extremely stable. This design, with its large working distance, is particularly suitable for the monitoring and analysis of cell cultures, for example
- Strong and infinitely adjustable 30 W halogen illumination unit ensures the optimum illumination in the bright field of
 your samples. An additional Osram 100 W Epi fluorescence illumination unit is available to you as a fluorescence
 microscope (OCM 165) for perfect illumination and stimulation of your fluorescence samples
- A special Abbe N.A. 0.3 condenser with aperture diaphragm and large working distance of 72 mm guarantees the very best working practise in the bright field and with fluorescence applications.
- As standard, the OCM-1 range is fitted with a trinocular eyepiece tube
- The mechanical stage including specimen holder (Ø 118 mm) means that you can work quickly and effectively. Further brackets for petri dishes are included with delivery or available as accessories
- Further options such as, for example, a selection of eyepieces, objectives, specimen holders and other phase contrast units can be integrated as accessories
- A dust cover as well as user instructions are included with the delivery

Scope of application

Research and breeding of cell cultures and tissue cultures

Applications/Samples

Particularly for viewing samples in culture vessels (flasks, petri dishes, microtitre plates), translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, tissue, microorganisms if necessary, Immunofluorescence, FISH, DAPI staining etc.)

Technical data

- Infinity optical system
- 5-fold lens revolving unit
- Siedentopf 45° inclined
- dioptre compensation both sides

OCM 161

Overall dimensions W×D×H 599×304×530 mm net weight approx. 13,968 kg

OCM 165

Overall dimensions W×D×H 782×304×530 mm net weight approx. 21,968 kg $\,$

STANDARD









Model	Optical system	Tube	Illumination
OCM 161	Infinity	Trinocular	30W Halogen (Durchlicht)
OCM 165	Infinity	Trinocular	30W Halogen (Durchlicht), 100W HBO (Auflicht)
OCM 166	Infinity	Trinocular	30W Halogen (Durchlicht), 100W HBO (Auflicht)
OCM 167	Infinity	Trinocular	5W LED (Durchlicht), 5W LED (Auflicht)
OCM 168	Infinity	Trinocular	5W LED (Durchlicht), 5W LED (Auflicht)

Predefined stereo microscope set with simple telescopic arm and 4.5 W ring illumination unit for greater flexibility at the workstation



- The products in the KERN OZL-96 series are stereo zoom microscopes, which will impress
 you with their quality, easy handling, flexibility as well as their stability and economical price
- The 4,5W-LED ring lighting included as standard guarantees the very best illumination of your sample
- As well as excellent optical characteristics and their large working surface, these models offer
 the highest level of comfort in this class ideal for training companies, workshops as well as
 assembly and repair workstations, e.g. in the electronics industry
- The zoom objective offers you continuous magnification from 7×-45×
- The KERN OZL-9 series is available as a binocular or trinocular version
- The universal telescopic arm stand gives you a high level of flexibility. Particularly suitable for large samples and free work under the microscope
- Predefined stereo microscope sets with universal stand and illumination for your functional workplace
- This saves you spending time on configuration and being spoilt for choice in the combination
 of different components. In this way you get an in expensive and highly-flexible solution for
 your microscope workplace
- Simple convenient affordable
- Please note that articles marked with "UK" include a UK power supply

Model	Tube	Stand	Objective	Illumination
OZL 961	Binocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZL 961UK	Binocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZL 963	Trinocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZL 963UK	Trinocular	Universal (telescopic arm with plate)	0.7 x - 4.5 x	4.5W LED (Auflicht)

Predefined stereo microscope set with extendable telescopic arm and 4.5 W ring illumination unit for the highest level of flexibility



- The KERN OZM-9 is a range of excellent stereo zoom microscopes with above-average optical features
- The 4,5W-LED ring lighting included as standard guarantees the very best illumination of your sample
- With its large working distance, an extra large field of view and its brilliant resolution, the KERN OZM-9 provides sharp, high-contrast, colour-true images.
- The zoom objective offers you continuous magnification from 7×–45×
- There is a choice of one binocular model as well as one trinocular model for connecting a camera for documentation purposes and for quality reports.
- The extendable telescopic arm stand gives you the option of adapting the height to your sample. An additional extendable pillar in the horizontal axis of the telescopic arm guarantees additional range
- Please note that articles marked with "UK" include a UK power supply

Model	Tube	Stand	Objective	Illumination
OZM 912	Binocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 912UK	Binocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 913	Trinocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 913UK	Trinocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)

Predefined stereo microscope set with ball bearing double arm and 4.5 W ring illumination unit for safety and flexibility



- The KERN OZM-9 is a range of excellent stereo zoom microscopes with above-average optical features
- The 4,5W-LED ring lighting included as standard guarantees the very best illumination of your sample
- With its large working distance, an extra large field of view and its brilliant resolution, the KERN OZM-9 provides sharp, high-contrast, colour-true images.
- The zoom objective offers you continuous magnification from 7×–45×
- There is a choice of one binocular model as well as one trinocular model for connecting a camera for documentation purposes and for quality reports.
- The ball bearing double arm universal stand offers you the option of making smooth, easy and precise adjustments on the horizontal axis
- Please note that articles marked with "UK" include a UK power supply

Model	Tube	Stand	Objective
OZM 932	Binocular	Universal (ball bearing double arm with plate)	0,7 x - 4,5 x
OZM 932UK	Binocular	Universal (ball bearing double arm with plate)	0,7 x - 4,5 x
OZM 933	Trinocular	Universal (ball bearing double arm with plate)	0,7 x - 4,5 x
OZM 933UK	Trinocular	Universal (ball bearing double arm with plate)	0,7 x - 4,5 x

Predefined stereo microscope set with ball bearing double arm and 4.5 W ring illumination unit for safety and flexibility



- Predefined stereo microscope sets with universal stand and illumination for your functional workplace
- This saves you spending time on configuration and being spoilt for choice in the combination of different components. In this way you get an in expensive and highly-flexible solution for your microscope workplace
- The KERN OZM-9 is a range of excellent stereo zoom microscopes with above-average optical features
- The 4,5W-LED ring lighting included as standard guarantees the very best illumination of your sample
- With its large working distance, an extra large field of view and its brilliant resolution, the KERN OZM-9 provides sharp, high-contrast, colour-true images.
- The zoom objective offers you continuous magnification from 7×–45×
- There is a choice of one binocular model as well as one trinocular model for connecting a camera for documentation purposes and for quality reports.
- The individually adjustable hinged arm universal stand with clamp guarantees the highest level of flexibility and greatest range. Using the separate height adjustment and pull-out hinged arms means that large samples can be inspected
- Using the clamp means that the universal stand can be fixed to any work bench
- Simple convenient affordable
- Please note that articles marked with "UK" include a UK power supply

Model	Tube	Stand	Objective	Illumination
OZM 952	Binocular	Universal (articulated arm with clamp)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 952UK	Binocular	Universal (articulated arm with clamp)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 953	Trinocular	Universal (articulated arm with clamp)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 953UK	Trinocular	Universal (articulated arm with clamp)	0,7 x - 4,5 x	4,5W LED (Auflicht)

Predefined stereo microscope set with gas spring hinged arm and 4.5 W ring illumination unit for easy height adjustment



- The KERN OZM-9 is a range of excellent stereo zoom microscopes with above-average optical features
- The 4,5W-LED ring lighting included as standard guarantees the very best illumination of your sample
- With its large working distance, an extra large field of view and its brilliant resolution, the KERN OZM-9 provides sharp, high-contrast, colour-true images.
- The zoom objective offers you continuous magnification from 7×–45×
- There is a choice of one binocular model as well as one trinocular model for connecting a camera for documentation purposes and for quality reports.
- The gas spring hinged arm with clamp enables you to make rapid, simple adjustments. It is in held in the position which has been set by the integral gas spring

Model	Tube	Stand	Objective	Illumination
			Zoom	
OZM 982	Binocular	Universal (spring link arm with clamp)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 982UK	Binocular	Universal (spring link arm with clamp)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 983	Trinocular	Universal (spring link arm with clamp)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 983UK	Trinocular	Universal (spring link arm with clamp)	0,7 x - 4,5 x	4,5W LED (Auflicht)

Predefined stereo microscope sets with ECO universal stand and illumination for your functional workplace





- Sets which have already been defined, consisting of a stereo microscope head, a universal stand, a holder, a ring illumination and protective dust cover from our range
- Simple convenient affordable
- This saves you spending time on configuration and being spoilt for choice in the combination of different components. In this way you get an in expensive and highly-flexible solution for your microscope workplace[/]Please note that articles marked with "UK" include a UK power supply

			Objective	
Model	Tube	Stand		Illumination
			Zoom	
OZM 902	Binocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 902UK	Binocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 903	Trinocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)
OZM 903UK	Trinocular	Universal (telescopic arm with plate)	0,7 x - 4,5 x	4,5W LED (Auflicht)

Digital microscope set OBE-S

The fully-equipped all-round compound microscope as a comprehensive digital solution for schools, training and laboratories





OBE 104C825, OBE 104C832

- The proven OBE range is now also available to you as a comprehensive digital solution for your live investigations. Optionally available with an adapted tablet or C-mount camera. Naturally, the appropriate C-mount adapter is included with the delivery
- The KERN OBE-1 series is a range of high-quality, fully-equipped compound microscopes, which can't be beaten in terms of ease of use and ergonomic design
- The strong and continuously dimmable 3W LED guarantees optimum illumination of the samples and also ensures long service life
- The height-adjustable and thereby focusable 1.25 ABBE condenser with aperture diaphragm is a further quality feature of the OBE-1 series and ensures the very best concentration of light
- The adapted KERN ODC 241 tablet-camera has been specially developed for simple, convenient and direct investigation of the sample on the screen. Ideally suited for school pupils and students in education or for demonstration purposes in the laboratory
- The adapted C-mount camera is available in different versions and can be used anywhere
- For detailed information on the individual components, see the relevant product description of the individual item
- A large selection of different eyepieces, lenses, a simple polarisation unit and a dark field kit is also available
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of the delivery

Technical data

- Finite optical system (DIN)
- 4-fold lens revolving unit
- Siedentopf 30° inclined, 360° rotatable
- Dioptre compensation one-sided (for binocular and trinocular models)
- Overall dimensions W×D×H 320×180×365 mm
- net weight approx. 4,988 kg
- Eyepieces: HWF 10x / 18.0 mm
- Objective quality: achromatic
- Objectives (KERN OBE 104): 4x/10x/40x
- Objectives (KERN OBE 114): 4x/10x/40x/100x
- Illumination: 3W LED (Transmitted light)

STANDARD







Model	Included camera	Resolution	Interface	Sensor
OBE 104C825	ODC 825	5,1 MP	USB 2.0 (6,8 – 55 FPS)	CMOS 1/2,5"
OBE 104C832	ODC 832	5,1 MP	USB 3.0 (14,2 – 101,2 FPS)	CMOS 1/2,5"
OBE 104T241	ODC 241	5 MP	WLAN, USB 2.0, HDMI, SD (15 – 30 FPS)	CMOS 1/2,5"
OBE 124C825		5,1 MP		CMOS 1/2,5"
OBE 124C832		5,1 MP		CMOS 1/2,5"
OBE 124T241		5 MP		CMOS 1/2,5"
OBE 134C825		5,1 MP		CMOS 1/2,5"
OBE 134C832		5,1 MP		CMOS 1/2,5"
OBE 134T241		5 MP		CMOS 1/2,5"

Video microskope OIV-2

The comprehensive digital solution for increased working comfort when carrying out continuous monitoring work in industry



- The Kern OIV is a video microscope which has been constructed to optimise digital stereo microscopy. Our well-conceived, comprehensive solution with axial optical unit enables immediate, simple display of your samples on the screen
- The LED incident illumination unit (ring) included as standard guarantees the very best illumination of your sample
- Combined with the large working surface, recording objects on the screen is ideally suited for monitoring, analysis and documentation in industrial environments
- The excellent optical unit enables continuous sharp image tracking across the entire zoom range from 0.7×–5×
- The powerful 2.0 megapixel camera of the microscope without eyepieces offers, thanks to the HDMI output, smooth live monitoring of your samples from the HD monitor. In addition, the software which is easy to use, the USB stick as well as the USB mouse which are integral components of the delivery, mean you can process and store your results digitally
- A dust cover as well as user instructions are included with the delivery

Technical data

Optical system: AxialDimmable lighting

• Magnification ratio: 7,1:1

• Stand: mechanic

Data storage: External using USB (Max 128 GB)

Overall dimensions W×D×H 320×260×483 mm

STANDARD



Model	Resolution	Interface	Sensor	Visual field (mm)	Objective Zoom	Software functions
OIV 254	2 MP	HDMI (60 FPS)	CMOS 1/2"	29.8–4.2	0,7×–5×	Image capture
OIV 255	2 MP	HDMI (60 FPS)	CMOS 1/2"	29.8–4.2	0,7×–5×	Image and video recording, measurements

Video microskope OIV-6

The professional video microscope with auto-focus





- The Kern OIV is a video microscope which has been constructed to optimise digital stereo microscopy. Our well-conceived, comprehensive solution with axial optical unit enables immediate, simple display of your samples on the screen
- The LED incident illumination unit (ring) included as standard guarantees the very best illumination of your sample
- Combined with the large working surface, recording objects on the screen is ideally suited for monitoring, analysis and documentation in industrial environments
- The excellent optical unit enables continuous sharp image tracking across the entire zoom range from 0.7×–5×
- Through the integrated auto-focus, the focus level can also be optimised within a defined image section
- The powerful 2.0 megapixel camera of the microscope without eyepieces offers, thanks to the HDMI output, smooth live monitoring of your samples from the HD monitor. In addition, the software which is easy to use, the USB stick as well as the USB mouse which are integral components of the delivery, mean you can process and store your results digitally
- The OIV 656 guarantees software-controlled taking of images and videos with additional, extensive documentation functions

STANDARD



Model	Resolution	Interface	Sensor	Visual field (mm)	Objective Zoom	Software functions
OIV 656	2 MP	HDMI (30 FPS)	CMOS 1/2,8"	12.6–2.6	0,7×–5×	Images and videos, documentation

Universal stands OZB-UP

Individuality, variety and flexible working through our modular construction system - PREMIUM universal stands



OZB-A5201

- With our universal stands and basic stands, as well as microscope heads and external illumination units, you can configure your microscope to your own specifications and adapt it to your application
- Thanks to the versatile, adjustable universal stands it is possible to work in the very best way in all areas with the most varied of samples
- Universal stands are available as stand base variants as well as with the option of a bench clamp. Depending on the model, you have the choice of a telescopic arm stand, a jointed arm stand or a telescopic double arm universal stand with ball bearings
- A spring loaded universal stand including bench clamp will make your daily work with your stereo microscope easier

Technical data

• Column height: 515 mm

OZB-A5201/OZB-A5211/OZB-A5221

• Length Telescopic arm: 614 mm

OZB-A5202/OZB-A5212/OZB-A5222

• Length Telescopic arm: 553 mm

OZB-A5203/OZB-A5213/OZB-A5223

• Length Telescopic arm: 545

Model	Description
OZB-A5201	Telescopic arm – Plate – excl. holder
OZB-A5211	Telescopic arm – clamp table edge – excl. holder
OZB-A5221	Telescopic arm - clamp table centre - excl. holder
OZB-A5202	Jointed arm – Plate – excl. holder
OZB-A5212	Jointed arm – Clamp – excl. holder
OZB-A5222	Articulated arm - clamp table centre - excl. holder
OZB-A5203	Telescopic double arm with ball bearings – Plate – excl. holder
OZB-A5213	Telescopic double arm with ball bearings – Clamp – excl. holder
OZB-A5223	Ball bearing mounted double arm - clamp table centre - excl. holder

Universal stands OZB-UE

Individuality, variety and flexible working through our modular construction system - ECO universal stands



- With our universal stands and basic stands, as well as microscope heads and external illumination units, you can configure your microscope to your own specifications and adapt it to your application
- Thanks to the versatile, adjustable universal stands it is possible to work in the very best way in all areas with the most varied of samples
- Universal stands are available as stand base variants as well as with the option of a bench clamp. Depending on the model, you have the choice of a telescopic arm stand, a jointed arm stand or a telescopic double arm universal stand with ball bearings
- The spring loaded universal stands including bench clamp will make your daily work with your stereo microscope easier. Now including coarse adjustment knob for easy, flexible focussing.

Technical data

OZB-A1201/OZB-A1211

• Column height: 430 mm

• Length Telescopic arm: 385 mm

OZB-A1203/OZB-A1213

• Column height: 430 mm

• Length double arm: 480 mm

OZB-A6302

Height Spring loaded arm: 525 mmLength Spring loaded arm: 620 mm

OZB-A6301

• Column height: 300 mm

OZB-A6303

Height Spring loaded arm: 400 mmLength Spring loaded arm: 850

Model	Description
OZB- A1201	Telescopic arm – Plate – excl. holder
OZB- A1211	Telescopic arm – clamp edge of bench (range: max. 40 mm) – excl. holder
OZB- A1203	Telescopic double arm with ball bearings – Plate – excl. holder
OZB- A1213	Ball bearing mounted double arm - clamp edge of bench (range: max. 40 mm) – excl. holder
OZB- A6302	Spring loaded arm (Pneumatic spring) – Clamp (Range: max. 50 mm) – with holder (Coarse focusing knob)
OZB- A6301	Pillar stand with "C"-shape base – Plate – excl. holder
OZB- A6303	Spring loaded arm (Compression spring) – Clamp (Range: max. 50 mm) – with holder (Coarse focusing knob)

Stereo microscope heads OZB-M

Individuality, variety and flexible working through our modular construction system – Stereo microscope heads



KERN OZM 547

- To enable the highest level of flexibility for your special requirements and applications, we have a large selection of stereo microscope heads, universal stands and external illumination units, which are easy to combine.
- Through the different properties of the stereo microscope heads, as well as the flexibility of the universal stands and the professional fixing of our brackets, we can configure your ideal microscope to suit your needs.
- There are various microscope heads available from our product range for this purpose, both as binocular or trinocular versions.
- A C-mount adapter is required to connect a camera to the trinocular version Technical data
- Optical system: Greenough optics

Model	Description
OSF 512	Stereo microscope head - 1x/2x; Binocular; for OSF 522, OSF 523
OSF 516	Stereo microscope head - 2x/4x; Binocular; for OSF 526, OSF 527
OZL 461	Stereo zoom microscope head - 0,7x-4,5x; Binocular; for OZL 463

M-5
M-5
5
² -5
P-5

Ring illumination OZB-IR

Professional illumination units guarantee outstanding, uniform and strong illumination



KERN OZB-A4571

- Choose your favourite external illumination here to achieve maximum flexibility and greatest possible ease of use in stereo microscopy
- These professional illumination units provide a quality of light at a high, constant intensity at all times
- Regardless of whether your choice is space-saving ring lights or cold light sources using optical fibre, our range is all you can wish for
- With the OZB-A7101 polarisation ring illumination unit, you also have an excellent component which has been specially optimised for observing shiny surfaces
- Naturally, these external illumination units also fit your standard stereo microscope (Exception: The ring lighting units cannot be used in combination with the following ranges: OSE-1, OSF-4G, OZL-44, OZL-45, OZL-45R, OZC-5 and OZG-4)
- NEW: With the OZB-A4516-LED swan neck illumination unit with focusable light beam, you can adjust the illumination to suit your needs. Spot or scattered radiation means that you can achieve the very best illumination of your sample.
- Please note that articles marked with "UK" include a UK power supply

Model	Illuminance	Inner diameter mm	Colour temperature K	Brightness adjustable	segmen- table
070 44574	4)4/ ED			O.F.	
OZB-A4571	4W LED	60	7000-11000 K	A	_
OZB-A4571UK	4W LED	60	7000-11000 K	 €	_
OZB-A4572	4W LED	60	6500-7000 K	 €	 ✓
OZB-A4572UK	4W LED	60	6500-7000 K	%	%
OBB-A6102	4,5W LED	63	6313 K	%	_
OBB-A6102UK	4,5W LED	63	6313 K	%	_
OZB-A7101	4,5W LED	62	6500-7000 K	 €	_

Fiber illumination OZB-IF

Cold light sources and ring lights for maximum flexibility in stereo microscopy



KERN OZB-A4515

- Choose your favourite external illumination here to achieve maximum flexibility and greatest possible ease of use in stereo microscopy
- These professional illumination units provide a quality of light at a high, constant intensity at all times
- Regardless of whether your choice is space-saving ring lights or cold light sources using optical fibre, our range is all you can wish for
- With the OZB-A7101 polarisation ring illumination unit, you also have an excellent component which has been specially
 optimised for observing shiny surfaces
- Naturally, these external illumination units also fit your standard stereo microscope (Exception: The ring lighting units cannot be used in combination with the following ranges: OSE-1, OSF-4G, OZL-44, OZL-45, OZL-45R, OZC-5 and OZG-4)
- NEW: With the OZB-A4516-LED swan neck illumination unit with focusable light beam, you can adjust the illumination to suit your needs. Spot or scattered radiation means that you can achieve the very best illumination of your sample.
- Please note that articles marked with "UK" include a UK power supply

Model	Description	Length	Illuminance	Colour temperature
		mm		K
OZB-A4515	Dual fiber Unit LED	300	6W LED	5600-6300 K
OZB-A4515UK	Dual fiber Unit LED	300	6W LED	5600-6300 K
OZB-A4516	Cold light source LED with double gooseneck	540	20W LED	6400 K

Microscope camera ODC-85

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



- The ODC-851 HDMI microscope camera has been specially developed for direct HDMI connection to your HDMI compatible display device. The images can also be stored directly onto the SD card delivered with the device.
- As an alternative, a USB 2.0 connection is also still available to connect a laptop or PC.
- Power supply is from an external 12 V power unit.
- Scope of supplies: Camera, USB mouse, USB 2.0 cable, HDMI cable and SD card (16 GB)
- Please order the appropriate C-mount adapter to fit your KERN microscope now **STANDARD**















Model	Resolution	USB	Sensor	Sensor size	Colour/monochrome
ODC 851	2 MP	2.0	CMOS	1/2"	
ODC 852	5 MP	2.0	Sony CMOS	1/1,8"	

Microscope camera ODC-84

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





- The high-resolution, professional ODC-84 range offers you an impressive 20 megapixel resolution which will give you bright detailed views of your sample. By using the integrated USB 3.0 interface, live images are transferred to the KERN OXM 902 for processing and documentation
- Power supply is through the USB interface so that there is no requirement for an external power source
- As well as the camera, the delivery includes our multi-lingual VIS Basic microscope camera software KERN OXM 901 for the ODC-82/83 range, VIS Pro microscope KERN OXM 902 for the ODC-84 range, a USB cable (length: 2 m), various eyepiece adapters and an object micrometre to calibrate the software
- Please order the appropriate C-mount adapter to fit your KERN microscope now (only 1,0x possible)

Note: Can only be used in combination with compound microscopes **STANDARD**







Model	Resolution	USB	Sensor	Sensor size	Colour/monochrome	Supported operating system
ODC 841	20 MP	2.0	Sony CMOS	1"	iC	os .

Microscope camera ODC-86

The cooled camera for your professional fluorescence examination



- The ODC 861 camera with Peltier cooling technology has been specially designed for fluorescent applications. It is able to significantly compensate for image noise associated with weak lighting. Due to its high resolution and light-sensitive Sony CMOS colour sensor it proves first-class images. The practical, sturdy storage box serves as protection and for transportation of this premium camera
- Realtime images can be transferred straight to a PC or laptop using the integrated USB 3.0 interface. As an alternative, 2 USB 2.0 interfaces are available, to operate the camera with the KERN OXM 902 software which is included with the delivery
- Power supply is from an external 12 V power unit.
- Please order the appropriate C-mount adapter to fit your KERN microscope now (only 1,0x possible)

Note: Can only be used in combination with compound microscopes **STANDARD**







Model	Resolution	USB	Sensor
ODC 861	20 MP	2.0	Sony CMOS

Analogue refractometer ORA-AL

Area of application: Beer/Alcohol





- The models in the KERN ORA-AL range are universal, maintenance-free analogue manual refractometers
- The practical and robust design means that it can be used simply, efficiently and on a permanent basis, day in day out
- The manual effort to convert the value is avoided by the use of several selectable scales and thereby eliminates user error
- These scales have been specially developed, calculated precisely and checked. Another key feature is the very thin, clear lines
- The optical system and the prism cover are made from special materials, which enable you to measure with low tolerances
- All models are fitted with an eyepiece which can be adjusted easily and smoothly to different visual capacities
- The models which are marked "ATC" have automatic temperature compensation, which makes it possible to obtain precise measurements at different environmental temperatures
- All models are fitted with an eyepiece which can be adjusted easily and smoothly to different visual capacities:
 - Storage box
 - Calibration solution
 - if necessary, calibration block
 - Pipette
 - Screwdriver
 - Cleaning cloth
- Further accessories are available as options

Area of application: Beer/Alcohol

The following models are particularly suitable for determining the sugar content of the original wort in its unfermented state. The value can be read straightaway, without having to be converted, using the SG Wort and Degrees Plato scales. In addition, the percent by volume and percent by mass scales can be used to determine the alcohol content of clear spirits

Main areas of application

- Alcohol production
- Beer brewers

STANDARD OPTION







Model	Scales	Measuring capacity	Division
ORA 3AB	Brix Stammwürze (Bier)	0 – 32 % 1,000 – 1,130 sgW	0,2 ‰ 0,001 sgW
ORA 3AA	Brix Stammwürze (Bier)	0 - 32 % 1,000 - 1,130 sgW	0,2 ‰ 0,001 sgW
ORA 4AB	Plato	0 – 18° P	0,1° P
ORA 4AA	Plato	0 – 18° P	0,1° P
ORA 1AB	Volume percent	0 – 50 % (v/v) 50 – 80 % (v/v)	1 % (v/v) 2,5 % (v/v)
ORA 2AB	Masspercentage	0 – 50 % (w/w) 50 – 80 % (w/w)	1 % (w/w) 2,5 % (w/w)

Digital refractometer ORF-B

Area of application: Sugar



- The models in the KERN ORF-B range are accurate and universal, maintenance-free digital manual refractometers
- Other key features are the easy handling and sturdiness
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement.
- The large range of models with either a single or multiple measuring scales means that you can use the product in many application areas
- The optimised device software can give the measurements in various measurement scales
- The integrated automatic temperature compensation (ATC) means that you can work easily and quickly, as you do not have to manually convert the measurement
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample
- Included in the scope of supply:
 - Calibration solution
 - Pipette
 - Storage case
 - 2 x AAA batteries
 - Leather case
 - Screwdriver
 - Cleaning cloth

Technical data

• Measuring temperature: 5-40 °C

• Overall dimensions W×D×H 145×67×40 mm

Net weight approx. 558,21 gPower supply: 2×1.5 V AAA

• Service life of the batteries: approx. 3,750 measurements

• ATC (Automatic temperature compensation)

• Minimum sample volume: 2 drops

•

Area of application: Sugar

The following models are particularly suitable for measuring the Brix value. These mean that you can determine the sugar content in foods, primarily in fruit, vegetables, juice and drinks which contain sugar. This refractometer also is ideal for the monitoring of processes in industry (coolant monitoring, oils and fats). You can also choose to display the refraction index.

Main areas of application

- :Industry: Process and quality control, lubricant control
- Food processing industry: drinks, fruit, sweets
- Agriculture: Determining the degree of ripeness of fruit for quality control during the harvest
- · Restaurants and industrial kitchens

STANDARD







Model	Scales	Measuring capacity	Accuracy	Division	Option Factory calibration certificate
ORF 92BM	Refractive index Brix	1,4370 nD - 1,5233 nD 58 % - 92 %	0,0003 nD 0,2 %	0,0001 nD 0,1 %	%
ORF 85BM	Refractive index Brix	1,3330 nD - 1,5100 nD 0 % - 85 %	0,0003 nD 0,2 %	0,0001 nD 0,1 %	%

Digital refractometer ORF-H

Area of application: Honey



- The models in the KERN ORF-H range are accurate and universal, maintenance-free digital manual refractometers
- Other key features are the easy handling and sturdiness
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement.
- The large range of models with either a single or multiple measuring scales means that you can use the product in many application areas
- · The optimised device software can give the measurements in various measurement scales
- The integrated automatic temperature compensation (ATC) means that you can work easily and quickly, as you do not have to manually convert the measurement
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample
- Included in the scope of supply:
 - Calibration solution
 - Pipette
 - Storage case
 - 2 x AAA batteries
 - Leather case
 - Screwdriver
 - Cleaning cloth

Technical data

- Measuring temperature: 5-40 °C
- Overall dimensions W×D×H 145×67×40 mm
- Net weight approx. 558,21 g
- Power supply: 2×1.5 V AAA
- Service life of the batteries: approx. 3,750 measurements
- ATC (Automatic temperature compensation)
- Minimum sample volume: 2 drops

Area of application: Honey

Main areas of application: Beekeeping Honey production

STANDARD







Model	Scales	Measuring range	Accuracy	Division	Option Factory calibration certificate
ORF 92HM	Refractive index Brix Baumé Water content	1,4370 nD - 1,5233 nD 58 % - 92 % 38 °Bé - 43 °Bé 13 % - 25 %	0,0003 nD 0,2 % 0,2 °Bé 0,2 %	0,0001 nD 0,1 % 0,1 °Bé 0,1 %	SÚ.

Digital refractometer ORF-S

Area of application: Salt



- The models in the KERN ORF-S range are accurate and universal, maintenance-free digital manual refractometers
- Other key features are the easy handling and sturdiness
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement.
- The large range of models with either a single or multiple measuring scales means that you can use the product in many application areas
- The optimised device software can give the measurements in various measurement scales
- The integrated automatic temperature compensation (ATC) means that you can work easily and quickly, as you do not have to manually convert the measurement
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample
- Included in the scope of supply:
 - Calibration solution
 - Pipette
 - Storage case
 - 2 x AAA batteries
 - Leather case
 - Screwdriver
 - Cleaning cloth

Technical data

- Measuring temperature: 5-40 °C
- Overall dimensions W×D×H 145×67×40 mm
- Net weight approx. 0,55821 kg
- Power supply: 2×1.5 V AAA
- Service life of the batteries: approx. 3,750 measurements
- ATC (Automatic temperature compensation)
- Minimum sample volume: 2 drops

Area of application: Salt

The following models are particularly suitable for the measurement and concentration control of the mass fraction of natrium chloride in water as well as of the content of NaCl (salt) in water. This is often used in the preparation and the cooking of sauces, bases for pastries, the production of brines (e.g. for white cheese) and the preparation of seafood and marinades for meat. You can also choose to display the refraction index.

Main areas of application

- Food processing industry
- Restaurants and industrial kitchens

STANDARD







Model	Scales	Measuring range	Accuracy	Division	Option Factory calibration certificate
ORF 3SM	Refractive index Brix Salt (NaCl)	1,3330 nD - 1,4100 nD 0 % - 45 % 0 % - 28 %	0,0003 nD 0,2 % 0,2 %	0,0001 nD 0,1 % 0,1 %	%

Digital refractometer ORF-W

Area of application: Wine



- The models in the KERN ORF-W range are accurate and universal, maintenance-free digital manual refractometers
- Other key features are the easy handling and sturdiness
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement.
- The large range of models with either a single or multiple measuring scales means that you can use the product in many application areas
- The optimised device software can give the measurements in various measurement scales
- The integrated automatic temperature compensation (ATC) means that you can work easily and quickly, as you do not have to manually convert the measurement
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample
- Included in the scope of supply:
 - Calibration solution
 - Pipette
 - Storage case
 - 2 x AAA batteries
 - Leather case
 - Screwdriver
 - Cleaning cloth

Technical data

- Measuring temperature: 5–40 °C
- Overall dimensions W×D×H 145×67×40 mm
- Net weight approx. 558,21 g

- Power supply: 2×1.5 V AAA
- Service life of the batteries: approx. 3,750 measurements
- ATC (Automatic temperature compensation)
- Minimum sample volume: 2 drops

Area of application: Wine

The following models are particularly suitable for measuring the sugar content in fruit. This is used to determine what alcohol content is to be expected from the fruit You can also determine the degree of ripeness of fruit (fruit sugar), e.g. grapes etc.

Main areas of application:

- Agriculture: Wine and fruit cultivation
- Wine production
- Must and alcohol production

STANDARD







Model	Scales	Measuring range	Accuracy	Division		Option Factory calibration certificate
ORF 2WM	Oechsle KMW (Babo) Mass SW Vol AP	0°Oe - 150 °Oe 0 °KMW - 25 °KMW 0 % - 35 % 0 % - 22 %	1 °Oe 0,2 °KMW 0,2 % 0,2 %	1 °Oe 0,1 °KMW 0,1 % 0,1 %	ď	

Digital refractometer ORF-U

Area of application: Industry/Motor vehicle industry



- The models in the KERN ORF-U range are accurate and universal, maintenance-free digital manual refractometers
- Other key features are the easy handling and sturdiness
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement.
- The large range of models with either a single or multiple measuring scales means that you can use the product in many application areas
- The optimised device software can give the measurements in various measurement scales
- The integrated automatic temperature compensation (ATC) means that you can work easily and quickly, as you do not have to manually convert the measurement
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample
- Included in the scope of supply:
 - Calibration solution
 - Pipette
 - Storage case
 - 2 x AAA batteries
 - Leather case
 - Screwdriver
 - Cleaning cloth

Technical data

- Measuring temperature: 5–40 °C
- Overall dimensions W×D×H 145×67×40 mm
- Net weight approx. 558,21 g

- Power supply: 2×1.5 V AAA
- Service life of the batteries: approx. 3,750 measurements
- ATC (Automatic temperature compensation)
- Minimum sample volume: 2 drops

Area of application: Industry/Motor vehicle industry

The following models are particularly suitable for measuring and determining AdBlue, glycol concentration (ethylene: EG and propylene: PG), of battery fluid (BF), urea and measuring the freezing point of screen wash (CW). Furthermore, these models are suitable for measuring temperature-exchange systems.

Main areas of application:

- Motor vehicle industry
- Chemical industry
- Solar industry (checking frost protection)
- Geothermal power (measuring brine concentration with geothermal energy)
- Forestry management

STANDARD







Model	Scales	Measuring range	Accuracy	Division		Option Factory calibration certificate
ORF 2UM	EG PG CW BF	-50 °C - 0 °C -50 °C - 0 °C -40 °C - 0 °C 1,00 kg/l - 1,50 kg/l	0,5 °C 0,5 °C 0,5 °C 0,01 kg/l	0,1 °C 0,1 °C 0,1 °C 0,01 kg/l	Æ	
ORF 5UM	EG PG CW Urea	-50 °C - 0 °C -50 °C - 0 °C -40 °C - 0 °C 0 % - 40 %	0,5 °C 0,5 °C 0,5 °C 0,2 %	0,1 °C 0,1 °C 0,1 °C 0,1 %	Ø	
ORF 6US	Refractive index Urea	1,3330 nD - 1,4100 nD 0 % - 40 %	0,0003 nD 0,2 %	0,0001 nD 0,1 %	V	

Digital refractometer ORF-E

Digital measurement of refraction index for universal application - ECO refractometer



- The models in the KERN ORF-E range are accurate, universal and maintenance-free digital manual refractometer
- Other key features are the easy handling and sturdiness
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement.
- The integrated automatic temperature compensation (ATC) means that you can work easily and quickly, as you do not have to manually convert the measurement
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample
- Included in the scope of supply:

Calibration solution

Pipette

Storage case

2 x AAA batteries

Leather case

Screwdriver

Cleaning cloth

STANDARD







Model	Scales	Measuring capacity	Accuracy	Division	Option Factory calibration certificate		
ORF 45BE	Brix	0% - 45 %	0,2 %	0,1 %	961-290		
ORF 45RE	Refractive index	1,3330 nD - 1,4098 nD	0,0003 nD	0,0001 nD	961-290		
1 result is available, use up and down arrow keys to navigate.							

Digital refractometer ORM-B_ORM-R

Digital calculation index measurement for universal applications





- The KERN ORM refractometers are accurate and universal maintenance free digital handheld refractometers.
- Other key features are the easy handling and sturdiness
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- The large, easy-to-read display with integrated temperature display supports the user to reliably determine the measurement
- The integrated automatic temperature compensation (ATC) means that you can work easily and quickly, as you do not have to manually convert the measurement
- A quick and user-friendly calibration of the refractometer is possible at any time using commercially available distilled water
- The refractometers of the KERN ORM series are protected against dust and splash water according to the international protection class IP65. You can rinse the refractometer under running water after use
- Included in the scope of supply
 - Pipette
 - 1×AAA (1.5 V)
 - User manual
- Measuring temperature: 0–40 °C
- Overall dimensions W×D×H 121×58×25 mm
- Net weight approx. 289 g
- Power supply:1×AAA (1.5 V)
- Service life of the batteries: approx. 10,000 measurements
- ATC (Automatic temperature compensation)

• Minimum sample volume: 2 drops

STANDARD









Model	Scales	Measuring capacity	Accuracy	Division	Option Factory calibration certificate
ORM 50BM	Refractive index Brix	1,3330 nD - 1,4200 nD 0,0 % - 50,0 %	0,0003 nD 0,2 %	0,0001 nD 0,1 %	%
ORM 1RS	Refractive index Brix	1,3330 nD - 1,5177 nD 0,0 % - 90,0 %	0,0003 nD 0,2 %	0,0001 nD 0,1 %	%

Digital refractometer ORL-B

Digital measurement of refraction index for universal application





- The models in the KERN ORL range are accurate, universal and maintenance-free digital desktop refractometers
- Other key features are the extra-large measuring range and a high degree of accuracy
- With their handy design, they are ideal for convenient and rapid everyday use
- The large, easy-to-read display with integrated temperature display supports the user to reliably determine the measurement
- The integrated automatic temperature compensation (ATC) means that you can work easily and quickly, as you do not have to manually convert the measurement
- A quick and user-friendly calibration of the refractometer is possible at any time using commercially available distilled water
- Mean value measurements possible
- Included in the scope of supply:
 - Pipette
 - Storage case
 - USB cable
 - Power adapter
 - Screwdriver

Model	Scales	Measuring capacity	Accuracy
ORL 94BS	Refractive index	1,3330 nD - 1,5290 nD	0,0002 nD
	Brix	0 % - 94 %	0,1 %

Polarimeter OAB-N

The ideal helper for getting started with the analysis of your optically active solutions in the laboratory



- The KERN OAB 10LN is a manual polarimeter which is characterised by its ergonomic design and easy handling
- The powerful 589 nm sodium vapour lamp is the optimum light source to produce a linear, polarised beam of light
- The 1° scale division including Nonius (0.05°) enables precise definition of the angle of rotation of the substance to be observed
- To hold liquid samples, two glass cuvettes (100 mm/200 mm) are included with the delivery
- Included with delivery: Sodium vapour lamp, 100 mm glass cuvette, 200 mm glass cuvette, Replacement lenses and sealing rings for cuvettes

Technical data

- Light source: Sodium vapour lamp (589 nm)
- Stabilisation time: 10 mins after switching on
- Overall dimensions W×D×H 500×130×330 mm

Main areas of application

- Pharmacies
- Hospitals
- Drinks industry
- Food processing industry
- Chemical industry
- Laboratories
- Training

STANDARD



Model	Scales	Measuring range	Division	Vernier	Wave lenght
OAB 10LN	Optical rotation	180 °	1 °	0,05°	589 nm

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)<u>279-</u>98-46 Казань (843)206-01-48 Россия +7(495)268-04-70

Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73

Киргизия +996(312)-96-26-47

Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Саранск (8342)22-96-24 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35

Казахстан +7(7172)727-132

Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35 Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93