

OUR FOCUS IS ON YOUR VISION



Karl Kaps
Dental
Microscopes

Perfect Balance
for your Dental Surgery



Kaps Dental-Microscopes

High-performance and user-friendly

Powerful and user-friendly, Kaps dental microscopes support the dentist in his demanding work, whether in endodontics, implantology, periodontology or restorative dentistry.

The models **Kaps 1100 - 1450** are built in the modular system and offer almost unlimited equipment options.

Individually tailored to your needs, the microscope is optimally prepared for your personal requirements. And should the requirements change, retrofitting the device at any time is quick and easy.

The wide range of accessories also supports you in all treatments and is just as easy and intuitive to operate as the microscope itself.

All versions are available on a mobile stand or for wall or ceiling mounting.

Karl Kaps is a company with more than 70 years of experience in developing and manufacturing medical microscopes. The innovative, long-established company is based in Asslar, Germany, from where it successfully operates in over 70 countries through its very well developed dealer network.



Kaps 1100 with swivel tube and comfort handles

Uncompromising Quality

Features at a glance

Brilliant Optics

- Crystal-clear images and high-resolution details
- Natural colors (apochromatic optics)
- Whether progressively with a changer system or continuous with a zoom system, the microscopes provide a general overview at low magnification as well as clear detail recognition at higher magnification.

Ultra-Bright LED Illumination

The LED lighting enables a glimpse into areas that are normally difficult to access.

- The high illuminance, the significantly better contrast and the color temperature in daylight quality make it possible to work fatigue-proof.
- The lighting system is highly energy-efficient. The high lifetime of modern LEDs also guarantees lower operating costs.

Balancing System

Using the balancing system, the Kaps dental microscope can be adjusted smoothly and precisely to any position you require, even when adapted accessories are used.

Free Motion Magnetic Brake System

Release the brakes by pressing a button and move the microscope without any effort. When you have reached the new working position, release the button and the position is fixed.

Comfortable Handling

Kaps dental microscopes have a great working and operating comfort. All elements are optically clean and user-friendly integrated.

Ergonomic Design

Working with the Kaps dental microscope is always done in a comfortable and upright, ergonomically correct position. Even with long treatment times, successful neck and back pain is prevented.

Accessories and Upgrade

Kaps dental microscopes have an extensive range of accessories - tailored to your personal needs.

With the additional photo and video adapters, Kaps dental microscopes can be retrofitted quickly and easily.

Thanks to the modular system, the Kaps 1100 dental microscope can easily be upgraded to a Kaps 1450 - in a simple, quick and easy way.

Color your Scope

Perfect integration of the dental microscope into the color concept of your dental practice. Karl Kaps offers a wide color palette of special finishes. (on request)

Durability

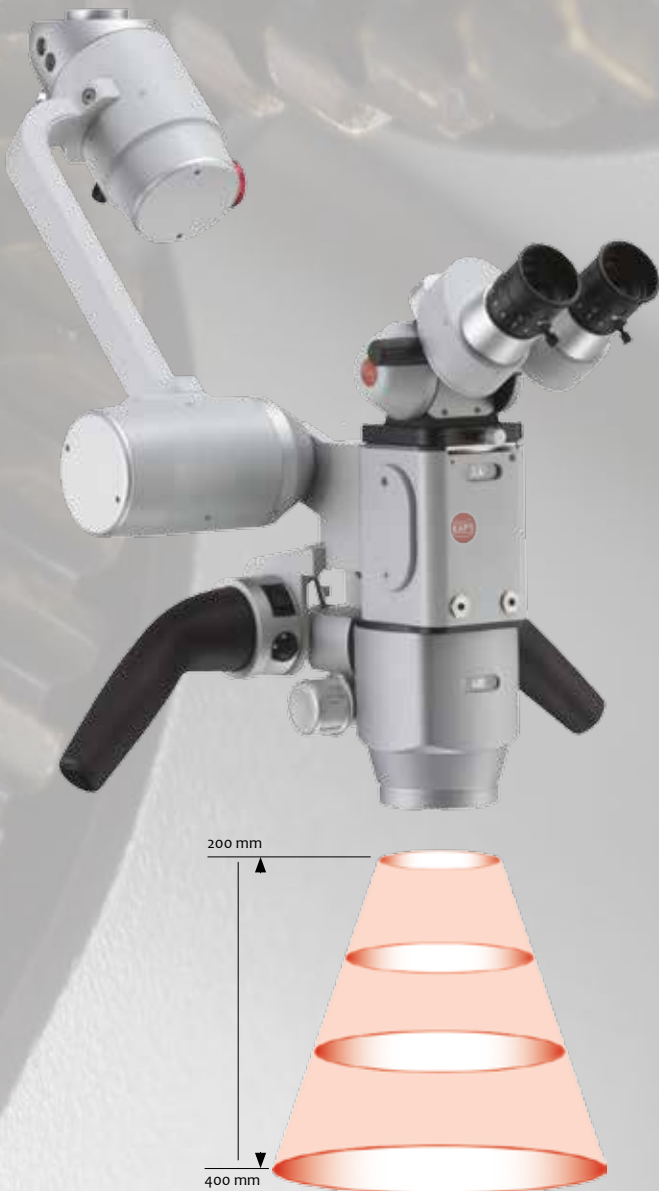
Dental microscopes from Karl Kaps are robust and designed for professional daily use in a dental practice and hospitals. They are neither susceptible to servicing, nor is maintenance required at fixed intervals.



Brilliant Optics - Powerful Illumination

For an excellent view of the treatment field

Module 50



Kaps 1450
with Vario Objective (Module 50)

Kaps dental microscopes offer high-contrast and color-fast visualization solutions.

Brilliant optics and ultra-bright LED lighting go hand in hand.

The Kaps dental microscopes provide sharp and high-contrast images in natural colors and with high-resolution details.

All Kaps dental microscopes can be equipped with a **Vario Objective (Module 50)**. This objective stands for ergonomics in the workplace. The working distances can be infinitely adjusted from 200 mm to 400 mm. Thus, a lens change is unnecessary. They simply focus up and down on the focusing plane. Exactly coordinated optical components provide a high-contrast, brilliant and distortion-free image with high depth of focus.

Alternatively, the **Variflex-100** with a focal length of 220 - 320 mm is available. Retrofitting is possible within minutes by simply replacing the objective. Again, attention was paid to a high-quality apochromatic optics with multiple coating. This lens is ideal for photo and video documentation.

The manual or motorized zoom system in the range 1: 6 (from Kaps 1300) allows a flexible adjustment of working distance and magnification to the current treatment situation. You can quickly and smoothly switch between a detailed field of vision (maximum magnification) and the overview field (the largest possible field) without any restriction to your stereoscopic vision. In this way, you gain a comprehensive picture and can fully concentrate on your patient's treatment.

The orange filter helps to effectively cut out disturbing UV components, which can lead to premature curing during the placement of composite fillings.

Kaps Variflex-100



Kaps 1100
with Variflex-100 objective
and 45° ergonomic wedge

Integrated LED Illumination

By default, our Kaps dental microscopes are equipped with powerful LED illumination. This is on the performance level of a 180 watt Xenon lighting!

The contrasting color temperature of the LED illumination is very similar to daylight. This and the homogeneous lighting of the field of view contribute to fatigue-free work.

Another advantage is the long life time of about 50,000 hours and the low power consumption. The LED illumination produces little heat and is extremely quiet.

Optionally, the Kaps dental microscopes are also available with external Xenon illumination.

Ergonomic solutions

So that the daily routine does not hit the back

Ergonomics and ease of use play a major role in dental practices and clinics. Guard against neck and back pain even during long treatment times.

Equip your Kaps dental microscope with a **45° ergonomic wedge** for optimal ergonomics. The integrated **binocular turntable** neutralizes even uncomfortable microscope settings in the range $\pm 24^\circ$. You always sit in a comfortable and upright, ergonomically correct position and yet have the optimum viewing angle. Position the microscope at the angle at which you need it and adjust it to the position of the patient. It only takes one touch, and tube rotates into your preferred working position.



Effortless Positioning

All microscopic movements are effected with minimum effort. From the 200 version upwards the system is equipped with a **balancing system**. This enables the user to smoothly position the microscope exactly as needed, even with adapted accessories. Asymmetric load distribution on the microscope is balanced out and does not influence the ergonomics.

All versions from Kaps 1200 have a balancing system with **electromagnetic brakes** to immobilize the microscopic head in its current position. Press the button on the handle and the magnetic brakes are released. After shifting it to its new position, the button is released again and the new position is secured.

Ergonomics and ease of use.
Focus fully on the essentials.



For an ergonomically correct working position - Kaps 1100 with 45° ergonomic wedge with beam splitter, binocular turntable and photo tube
(Image with kind permission of Dr. Milen Dimitrov)

Kaps Dental Microscopes at a Glance

From the perfect All-rounder Kaps 1100 to the Highlight of the series Kaps 1400

Kaps 1100

All-rounder - always in balance



- 5-step apochromatic magnification changer
- Binocular swivel tube 0 - 210°
- Objective f = 250 mm with fine focusing (12 mm)
- Eyepieces 12.5 x V
- Balancing System
- Ergonomic handles
- Integrated LED illumination

Kaps 1200

Perfect handling thanks to the Free Motion magnetic brake



- 5-step apochromatic magnification changer
- Binocular swivel tube 0 - 210°
- Objective f = 250 mm with fine focusing (12 mm)
- Eyepieces 12.5 x V
- **Balancing system with magnetic brakes (Free Motion)**
- **Ergonomic handles with integrated control knobs**
- Integrated LED illumination



Kaps 1300

Stepless magnification thanks to manual zoom, perfect handling thanks to the Free Motion magnetic brake



- **Manual zoom 1:6**
- Binocular swivel tube 0 - 210°
- Objective f = 250 mm with fine focusing (12 mm)
- Eyepieces 12.5 x V
- Balancing system with magnetic brakes (Free Motion)
- Ergonomic handles with integrated control knobs
- Integrated LED illumination

Kaps 1400

Highlight of the series, the fully motorized dental microscope



- **Motorized zoom 1:6**
- Binocular swivel tube 0 - 210°
- Objective f = 250 mm with fine focusing (12 mm)
- Eyepieces 12.5 x V
- Balancing system with magnetic brakes (Free Motion)
- Ergonomic handles with integrated control knobs
- Integrated LED illumination

Kaps Accessories for Dental Microscopes

Powerful to the Last Detail



- **Kaps 45° ergonomic wedge with beam splitter and binocular turntable**

The unbeatable combination for an optimal viewing angle and comfort at the workplace.

- ➔ Order no. 101-990-100 (45° tube monolateral 50:50)
- ➔ Order no. 101-991-100 (45° tube monolateral 80:20)
- ➔ Order no. 101-993-100 (45° tube belateral 50:50 / 80:20)



- **Kaps photo tube for DSLR camera (Canon, Nikon)**

Multi-coated anti-reflection high-end optics for a frame-filling, low-distortion and image field leveled digital camera image for Canon and Nikon.

- ➔ Order no. 101-320-000



- **Kaps HD photo adapter for SONY Alpha 5000/6000 (also applies to existing SONY NEX-5/-6/-7)**

HD documentation of medical findings with apochromatic optics for brilliant and true color images with amazing detail diversity in full format.

- ➔ Order no. 101-327-000



- **Kaps HD video and documentation accessories**

Wide range of video and documentation accessories on request. Please ask for current information.



- **Kaps Variflex-100 in compact height**

Objective lens with a focal length of 220 - 320 mm and lens protection. It is fast and easy to use and immediately ready for use.

- ➔ Order no. 101-710-100 (Variflex-100)
- ➔ Order no. 101-712-100 (lens protection)



- **Kaps Vario objective (Module 50)**

Stepless adjustable working distance from 200 mm to 400 mm for more ergonomics in the workplace. Thus, an objective change is unnecessary. You simply focus up and down on the focusing plane.

- ➔ Order no. 162-700-000



- **Kaps lens protection**

For subsequent adaptation, suitable for all existing lenses (except Vario objectives). An 8-fold coating ensures the best sharpness and a high color quality. Reflections are completely avoided.

- ➔ Order no. 101-665-100



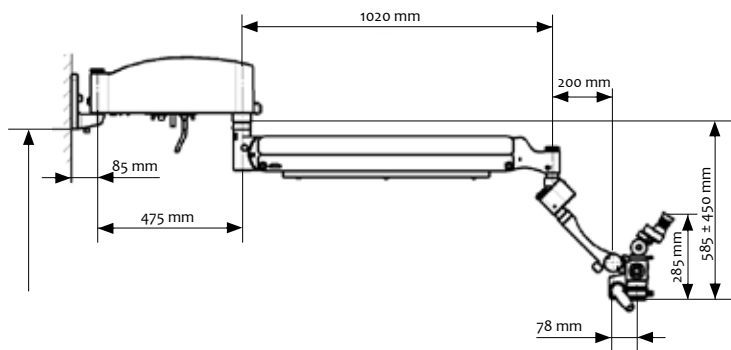
- **Asepsis**

For all adjusters and handles we offer asepsis caps.

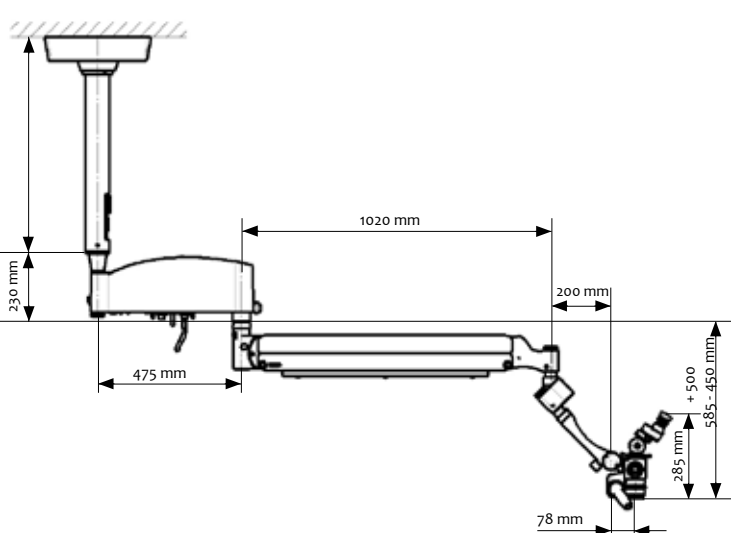
Technical Data

	Kaps 1100	Kaps 1200	Kaps 1300	Kaps 1400
Magnification	5-step apochromatic magnification changer		manual zoom 1:6	motorized zoom 1:6
Modification Range	1.5x - 40x available (dependent upon objectives and eyepieces)			
Field of view	120 mm - 7 mm (dependent upon objectives and eyepieces))			
Illumination	Integrated LED illumination Optional: Xenon 180 W (external) Integrated variable illumination spot size and orange filter			
Objectives	Fixed focal length from 100 mm to 400 mm offered in 50 mm increments (each with fine focusing 12 mm) Kaps-Variflex-100 f= 220 mm - 320 mm (stepless) Vario Objective (Modul 50) f= 200 mm - 400 mm (stepless and motorized)			
Eyepieces	10 x; 12,5 x			

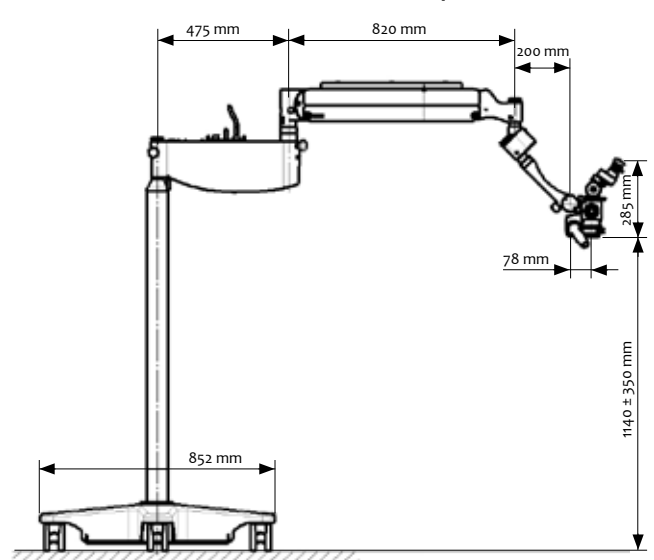
Kaps 1100 - Wall Mount



Kaps 1100 - Ceiling Mount



Kaps 1100 - Mobile Stand





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Karl Kaps is a global medical technology company, offering complete diagnosis and treatment solutions in the medical disciplines of otorhinolaryngology, ophthalmology, microsurgery, endodontics, neurosurgery, spinal surgery, gynecology and in all similar areas.

Modern, innovative surgical and diagnostic microscopes are developed and manufactured at the Asslar and Wetzlar production sites.

We aim to provide our customers with the best possible equipment for the medical care of their patients. This is our contribution to ensuring that correct diagnosis and successful therapy can be initiated.

More information can be found at
www.kaps-optik.de

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