

<b>Алматы</b> (7273)495-231	<b>Иваново</b> (4932)77-34-06	<b>Магнитогорск</b> (3519)55-03-13	<b>Пермь</b> (342)205-81-47	<b>Тверь</b> (4822)63-31-35
<b>Ангарск</b> (3955)60-70-56	<b>Ижевск</b> (3412)26-03-58	<b>Москва</b> (495)268-04-70	<b>Ростов-на-Дону</b> (863)308-18-15	<b>Тольятти</b> (8482)63-91-07
<b>Архангельск</b> (8182)63-90-72	<b>Иркутск</b> (395)279-98-46	<b>Мурманск</b> (8152)59-64-93	<b>Рязань</b> (4912)46-61-64	<b>Томск</b> (3822)98-41-53
<b>Астрахань</b> (8512)99-46-04	<b>Казань</b> (843)206-01-48	<b>Набережные Челны</b> (8552)20-53-41	<b>Самара</b> (846)206-03-16	<b>Тула</b> (4872)33-79-87
<b>Барнаул</b> (3852)73-04-60	<b>Калининград</b> (4012)72-03-81	<b>Нижний Новгород</b> (831)429-08-12	<b>Саранск</b> (8342)22-96-24	<b>Тюмень</b> (3452)66-21-18
<b>Белгород</b> (4722)40-23-64	<b>Калуга</b> (4842)92-23-67	<b>Новокузнецк</b> (3843)20-46-81	<b>Санкт-Петербург</b> (812)309-46-40	<b>Ульяновск</b> (8422)24-23-59
<b>Благовещенск</b> (4162)22-76-07	<b>Кемерово</b> (3842)65-04-62	<b>Ноябрьск</b> (3496)41-32-12	<b>Саратов</b> (845)249-38-78	<b>Улан-Удэ</b> (3012)59-97-51
<b>Брянск</b> (4832)59-03-52	<b>Киров</b> (8332)68-02-04	<b>Новосибирск</b> (383)227-86-73	<b>Севастополь</b> (8692)22-31-93	<b>Уфа</b> (347)229-48-12
<b>Владивосток</b> (423)249-28-31	<b>Коломна</b> (4966)23-41-49	<b>Омск</b> (3812)21-46-40	<b>Симферополь</b> (3652)67-13-56	<b>Хабаровск</b> (4212)92-98-04
<b>Владикавказ</b> (8672)28-90-48	<b>Кострома</b> (4942)77-07-48	<b>Орел</b> (4862)44-53-42	<b>Смоленск</b> (4812)29-41-54	<b>Чебоксары</b> (8352)28-53-07
<b>Владимир</b> (4922)49-43-18	<b>Краснодар</b> (861)203-40-90	<b>Оренбург</b> (3532)37-68-04	<b>Сочи</b> (862)225-72-31	<b>Челябинск</b> (351)202-03-61
<b>Волгоград</b> (844)278-03-48	<b>Красноярск</b> (391)204-63-61	<b>Пенза</b> (8412)22-31-16	<b>Ставрополь</b> (8652)20-65-13	<b>Череповец</b> (8202)49-02-64
<b>Вологда</b> (8172)26-41-59	<b>Курск</b> (4712)77-13-04	<b>Петрозаводск</b> (8142)55-98-37	<b>Сургут</b> (3462)77-98-35	<b>Чита</b> (3022)38-34-83
<b>Воронеж</b> (473)204-51-73	<b>Курган</b> (3522)50-90-47	<b>Псков</b> (8112)59-10-37	<b>Сыктывкар</b> (8212)25-95-17	<b>Якутск</b> (4112)23-90-97
<b>Екатеринбург</b> (343)384-55-89	<b>Липецк</b> (4742)52-20-81		<b>Тамбов</b> (4752)50-40-97	<b>Ярославль</b> (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

[www.karlkaps.nt-rt.ru](http://www.karlkaps.nt-rt.ru) | | [ksj@nt-rt.ru](mailto:ksj@nt-rt.ru)

# Технические характеристики на ЛОР-микроскопы, смотровые микроскопы SDM, SOM компании **Karl Kaps**

**Виды товаров:** микроскопы для настенного монтажа и использования с экзаменационными блоками, микроскопы для потолочного монтажа, микроскопы на мобильный стенд.

# ENT Examination Microscope from Karl Kaps

Small, Compact and Flexible

**ENT examination microscopes from Kaps' SOM® series will more than satisfy every requirement in your ENT practice wish list.**

The combination of proven and practically indestructible mechanical parts and outstanding optics, coupled with powerful illumination and easy handling, provides support with day-to-day routines and minor operations alike.

These small, compact and flexible Kaps SOM® examination microscopes offer image definition you can see, user friendliness you appreciate, and quality you can rely on.

We attached particular importance to achieving smooth and precise positioning, to enable you to remain sitting ergonomically in a comfortable upright position and result in far more relaxed working.

The combination of various additional components makes Kaps SOM® examination microscopes into all-rounders which are flexible in use and adapt perfectly to your particular requirements. It goes without saying that most components can be retrofitted without any problem.

Images with kind permission of Dr. med. Peter Brandau.



# No compromise on quality

## Brilliant Optics

The outstanding optics provide crystal-clear images in natural colors (apochromatic optics) with high resolution details down to the smallest structures.

## Powerful Illumination

You have a choice of different light systems. Whether coaxial cold light illumination or LED lighting - both versions offer consistent true color illumination and ensure that anatomical structures and blood vessels are clearly visible.

## Ergonomic Design

Working with Kaps SOM® series examination microscopes lets you adopt an ergonomic and comfortable upright posture throughout your work. This prevents neck or back pain from arising in the first place.

## Comfortable Stands

Whether you opt for a mobile stand or a fixed attachment to an exam unit, or whether you favor wall mounting or ceiling mounting - all Karl Kaps stands are distinguished by their easy handling, small footprint and stability. You can be sure to find the best solution for your consulting room or treatment room.

## Easy to Use

SOM® examination microscopes are easy to work with and stand out with their exceptional ease of positioning.

## Extensive Range of Accessories

The extensive range of accessories lets the SOM® examination microscope adapt to every customer's needs. The extra photo and video adapters allow Kaps examination microscopes to be retrofitted to create photo or video microscopes - for extensive documentation of findings.

## Additional Upgrades

Kaps SOM® examination microscopes can be retrofitted at any time. Many upgrades can be done independently, without the use of a service engineer.

## Durability

Karl Kaps examination microscopes are equipped with a high quality metal housing and are characterized by a long service life.





## See more

### Means Added Safety during Treatment

**Kaps SOM® examination microscopes provide high-contrast true color visualization solutions.**

Brilliant apochromatic optics and ultra-bright coaxial illumination go hand in hand.

SOM® microscopes provide crystal-clear three-dimensional imaging with great depth of focus and extraordinary color brilliance. Even the finest structures and the smallest details are clearly visible. This gives you maximum control over your work - the ideal prerequisite for a reliable diagnosis.

The optional 40 mm manual fine focus lets you conveniently focus on the desired area and find the correct working distance without having to change your preferred position.

The examination microscopes are available with a 3-step magnification changer, a 5-step magnification changer or a manual zoom 1:6.

## Powerful Illumination

**Proper illumination is the basic prerequisite for precise work.**

**Kaps ENT examination microscopes can be supplied with a variety of illumination systems.**

### **Cold Light Illumination**

The high light output as well as the precise and constant object illumination of the cold light source guarantees a perfect view of even the smallest detail.

### **LED Illumination**

The color temperature of the LED illumination strongly resembles daylight, possesses a high illuminance and provides excellent color reproduction, thus guaranteeing a fatigue-free working. Despite its high light intensity, the system only generates little heat. Other advantages are the high lifetime and the low power consumption.



# Comfortable Stands

Tailored to your Requirements



## SOM<sup>®</sup> 62 on a Mobile Stand

Our mobile stands provide a stable footing and can be flexibly positioned. Move the microscope around your examination area as you need and adopt a comfortable posture, or move it away completely when it is no longer required.



**SOM<sup>®</sup> 22**  
**for Wall Mounting and Use with**  
**Examination Units**

In combination with a column, this version is also used for fixing to the treatment units of all leading ENT unit manufacturers. Together, these form a harmonious unit.

You can either order a column for Kaps examination microscopes as an extra item when you place your order, or you can order the microscope directly from the manufacturer of the unit.



**SOM<sup>®</sup> 32**  
**for Ceiling Mounting**

The prerequisite for ceiling mounting is a stable concrete ceiling. Precise vertical assembly of the ceiling column can be effected using the ceiling adjustment fixture included in the scope of supply.

# User-Friendly Down to the Last Detail

Kaps examination microscopes are distinguished by their ease of positioning and their user-friendly design.



The Kaps SOM® is an extremely mobile manual examination microscope that is easy to operate and move into a particularly comfortable position. When it is no longer needed, it can be swiveled to one side to make more room.

Its operation is both intuitive and effective. Other lenses can be exchanged quickly and easily. This lets you stay beside the patient throughout and leaves you free to concentrate on the examination in hand.



# Kaps Accessories for SOM<sup>®</sup> Series

## Extensive Range of Solutions



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

Objective lens with a focal length of 220 - 320 mm and objective lens protection is quick and easy to interchange and ready for use.



- **Kaps observer tube** binocular or monocular

For viewing the examination field of a second person in the same magnification - particularly suitable for sterile assistance or training.



- **Kaps Handles**

Various handles are available for SOM<sup>®</sup> examination microscopes:

- Ergonomic handle on one or both sides
- T-handle
- Pistol grip



- **Kaps Beam Splitter with Endoscope Adapter**

For direct adaptation of an endoscope camera.

- very quick and easy to install
- low height, light weight



- **Kaps HD Video and Documentation Accessories**

Extensive range of video and documentation accessories available on request. Ask for our latest information. (similar image)



- **Kaps LED upgrade**

Durable LED retrofit set for fatigue-free working with daylight color temperature.

# Technical Data

## Kaps SOM® ENT examination microscope

Illumination	Coaxial cold light illumination (15 V/150 W) with spare bulb LED illumination (optional)
Lenses	Changeable lenses from 200 mm to 400 mm in steps of 50 mm Lens f = 200 mm and f = 250 mm with integrated focusing (14 mm) Kaps Variflex-100 objective lens with a focal length of 220 - 320 mm (optional)
Binocular tubes	Straight tube f = 125 mm or f = 159 mm, inclined tube f = 182 mm 0 - 210° on request
Eyepieces	Eyepieces WF 12.5 x V or WF 10 x V (with diopter adjustment)
Magnification	3-step magnification changer, 5-step magnification changer or manual zoom 1-6
Fine focusing	Manual fine focusing 40 mm (optional)
Secondary viewer	Binocular or monocular
Video camera	Adaptation of C-mount video cameras via beam splitter and TV tube
Integrated endoscopic adapter	For direct adaption for existing endoscopic cameras
Iris diaphragm, green filter, spot illumination	Optional

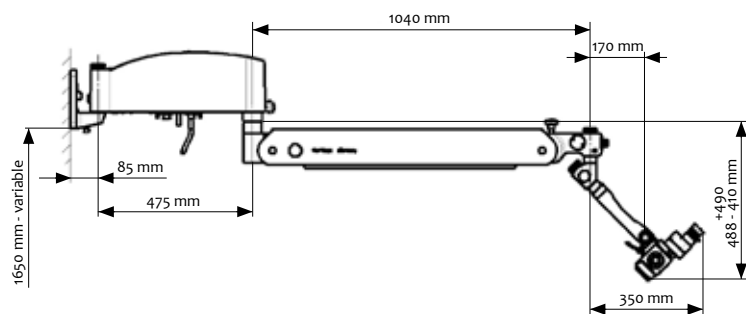
## Magnification Range

3-step and 5-step magnification unit with tube f = 125 mm

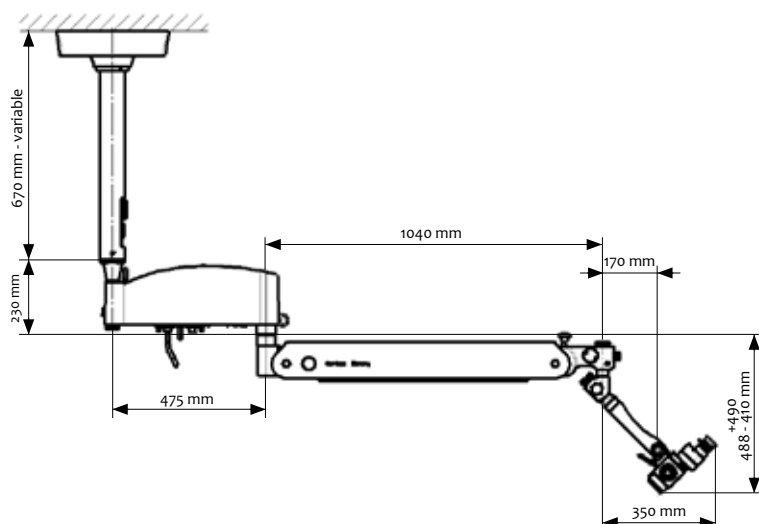
Magnification Range	0.4	0.63	1.0	1.6	2.5	Lens f = 200 mm Eyepiece magnification 12.5 x V
Magnification	3.2	5	8	12.8	20	
Field of view Ø in mm	52	34	22	14	8.5	
Magnification Range	0.4	0.63	1.0	1.6	2.5	Lens f = 250 mm Eyepiece magnification 12.5 x V
Magnification	2.6	4.0	6.4	10.2	16	
Field of view Ø in mm	61	40.4	26.3	16.8	10.7	

# Technical Data

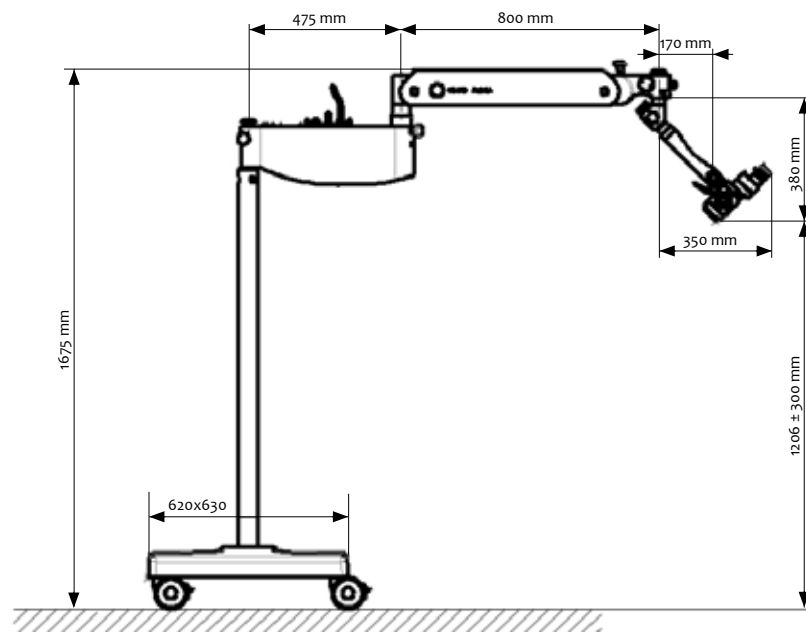
SOM® 22 - Wall Mounting



SOM® 32 - Ceiling Mounting



SOM® 62 - Mobile Stand



# Kaps SDM

Optics, Illumination, Comfort – It All Fits the Bill to a Tee



The Kaps SDM has 2 different mounting systems to choose from:

- SDM 60 on a mobile stand
- SDM 20 for wall mounting

The Kaps SDM examination microscope is designed for ENT specialists who are unwilling to compromise on optical quality and are looking for a high-quality, easy-maintenance microscope for carrying out examinations.

Kaps SDM is the perfect entry model and boasts a sensational price-performance ratio.

We have focused on the main features impacting medical examinations, and have combined tried-and-true Kaps optics with bright LED illumination and high operating comfort.

Kaps optics provides crystal-clear images and high-resolution details in natural colors (apochromatic optics).

The LEDone illumination system offers a number of extremely positive product characteristics that score over conventional halogen light sources:

- Fatigue-free detailed working in daylight quality
- Absolutely silent and vibration-free
- Long life (30,000 hours)
- Low energy requirement



## AT A GLANCE

- 3-fold magnification changer for excellent depth of focus and an outstanding spatial impression
- Wide-angle eyepiece lenses for eyeglass wearers included as standard
- Optional 45° coupling available for even easier and more accurate positioning and mobility

# Technical data

## Kaps SDM

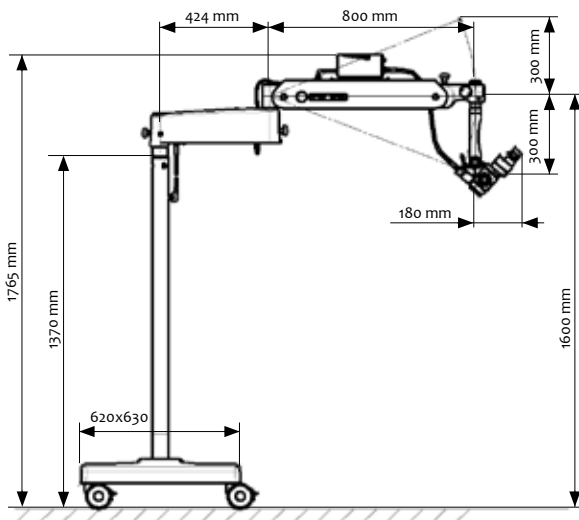
Illumination	LEDone illumination unit
Lenses	Changeable lenses from 200 mm to 400 mm in steps of 50 mm Lenses $f = 200$ mm and $f = 250$ mm with integrated focusing (14 mm)
Binocular tubes	Straight tube $f = 125$ mm or $f = 159$ mm
Eyepieces	Eyepieces WF 12.5 x V or WF 10 x V (with diopter adjustment)
Magnification	3-step magnification changer, 5-step magnification changer at additional cost
Fine Focusing	Manual fine focusing 40 mm (optional)
Video camera	Adapter for C-mount video cameras by beam splitter and TV tube
Integrated endoscope adapter	For directly adapting existing endoscope cameras

## Enlargement Factors

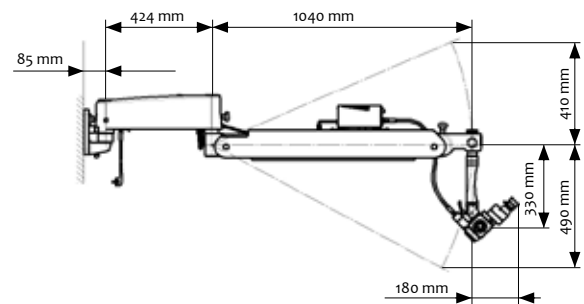
3-step and 5-step magnification unit with tube  $f = 125$  mm

Enlargement factor	0.4	0.63	1.0	1.6	2.5	lens $f = 200$ mm Eye piece magnification 12.5 x V
Magnification	3.2	5	8	12.8	20	
Field of view $\varnothing$ in mm	52	34	22	14	8.5	

Mobile stand



Wall mounting



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)279-98-46  
Казань (843)206-01-48  
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  
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  
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

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

[www.karlkaps.nt-rt.ru](http://www.karlkaps.nt-rt.ru) | | [ksj@nt-rt.ru](mailto:ksj@nt-rt.ru)