

## **Elio Microscope**



### A new generation microscope

ELIO HDM is the result of a rigorous approach, which aims to bring you the best solution for the acts requiring high magnification. The result will delight even the most skeptical. A new generation microscope with incomparable performance is born. Integrated into the surgical lighting, this new microscope cover more than one asset. With a X 60 zoom , it is able to detect the smallest detail in the structure of the tooth and the soft tissues. Replacing your traditional surgical lighting, ELIO HDM frees your workspace away from bulky devices.

## **Options**

### Montage

- Unit axes 35mm
- Unit axes 30mm
- Unit axes 28mm
- Unit axes 25mm
- Ceiling
- · Ceiling with column
- Ceiling with column and monitor arm
- Mobile

#### Longueur de bras

- Standard
- Long arm, 170cm

#### **Performances**

With a Full HD camera whose features are very advanced and with an optical particularly well studied, ELIO HDM reached unexpected performance (surprising). Its 60 X zoom allows you to inspect every detail. The great depth of field ensures sharpness whatever looks your work area. ELIO HDM is equipped with an autofocus which avoids you any manual adjustments.

No Need to adjust the aperture, focal length is ... The operator effectively focuses on the surgical act and ELIO HDM does the rest. All areas of the mouth are accessible either directly or through the vision dental mirror. The exceptional image accuracy opens new fields of application. ELIO HDM can be used both for daily practice as well as for acts of restorative dentistry, periodontics. It is particularly useful for the production of prosthetic acts.

see more video ...

# **Description**

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To Improve the visibility of the work to be done in the mouth , including search for small details, is a daily reality in the dental practice. Acts such as root canal treatment leads your eyes to a concentration on a very reduced field, causing , in addition to the difficulty to see , an eye fatigue that should not be overlooked . Technical protocols increasingly require an even more increasing accuracy. This is why the use of the operating microscope has found its place in dental cabinets.

Driven by a desire to push away the boundaries of technology, EKLER has designed a new generation of microscope. A unique product, a versatile product with performance ever seen, ELIO HDM 's mission is to provide practitioners with a particularly valuable assistance in the implementation of dental and periodontal acts. ELIO HDM not only improves visibility but it also improves your working comfort. With its 60x zoom and its Full HD picture ELIO HDM allows to observe every detail in full screen. Never a conventional microscope has achieved such a performance.



# **Education**





In universities ELIO belongs to the most up to date educational tools.

While it is impossible to show to a group of students the extraction of a molar for example, everything becomes possible with ELIO. The practical presentation can be broadcasted live in a lecture hall where students can attend the live class and discover up to the slightest details.

## Film and edit your movies

Elio is the unique and the essential dental tool for recording your interventions. By means of the video converter ELIO can be linked to a computer PC or Mac. The video sequences are stored in readable sizes by all kind of video equipment. The user can edit, add text, sound and use his movies in a purpose of training, communication and others.

## **Design and Light**

# A design which goes beyond the style

Gathering perfectly the ergonomics and the performances, this original set can be installed in the place of any other lighting and on any kind of equipment. ELIO offers multiple advantages with regard to the conventional lightings with halogen bulbs or LED. ELIO is not only a very successful dental lighting but also a real communications tool.

The integrated, very high-resolution camera and its autofocus, allows you all the time and without additional manipulation to communicate with your patient, your colleagues or your partners. Without heat and noiselessly, the head ELIO is completely tight for an optimal asepsis.

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By simple rotation you can obtain all the possible positions on three axes. The removable handles can be positioned according to the



wishes of the user.







Are you ready to see

# differently?

Welcome to the light

The peculiarity of the activity of the dental practitioner consists of the observation of details in a reduced and little accessible operative field. This vision of details requires a level of illumination raised to assure the best visual performances and reduce the tiredness. Like a LED Lighting of very high yield, ELIO offers not less than 55.000 LUXES in your field of vision. With its daylight (natural white, color temperature included between 6300°K and 6500°K) and without any carried shadow, ELIO creates the perfect conditions of the visual comfort by offering you a uniform light in your daily practice. A light with variable intensity able to adapt itself to all the acts and to the need of each.

## **Ergonomics**

### **Ergonomic**

Faithful to its philosophy EKLER developed ELIO HDM with a view to improve ergonomics and management space. This "all in one" product replaces advantageously the existing surgical lighting. This unit can be installed on the ceiling, wall or mobile foot stand. The image is projected on the monitor screen. Because of its design ELIO HDM offers many advantages and allows toimprove several aspects of the work.

## It improves posture work of the practitioner.

The dentist's practice consists of physical effort such as leaning forward, sometimes with a trunk rotation which can ultimately lead to a burnout at all levels of the spine position. Looking at the picture on the screen practitioner releases constraints. This prevents the tension in the neck and prevent back problems.





### It reduces eyestrain

The painstaking work strongly urges the vision: the mechanism of accommodation, provided by the lens and the eye muscles, allows adjustment of the focus of the image on the retina, convergence allows the fusion of the two retinal images thanks to the contraction of muscles surrounding the eye. The use of ELIO HDM avoids this eye fatigue due to indirect labor and excellent image quality displayed on the screen.

Moreover, the indirect labor eliminates very high light requirements, as is often the case in meticulous acts, and not suffer from fatigue induced by changes in light level.

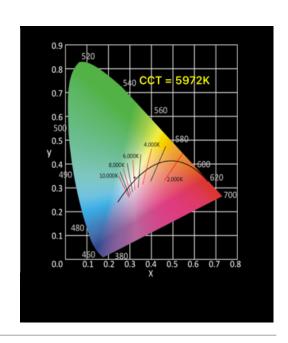
### It preserves the workspace

Due to its design ELIO HDM is used like any other lighting. It is used at a usual distance of 70cm. Its minimum sharpness distance is 50cm and thus, unlike the conventional microscope, gives free space around the patient's mouth and do not hamper the use of instruments, whips and does not run counter the activity of the assistant during your acts.

### **CHARACTERISTICS**

## Light

- White natural day light: 6000°K ±5%
- Good reproduction of colors : 90%
- Adjustable light Intensity until 52.000 Luxes
- No shadows carried
- $\bullet$  Completely tight and waterproof for an optimal asepsis
- Absence of UV radiation and no extra heat contribution
- Without fan and noiseless
- Source : 2LED x 6W, Consumption 12W
- Life expectancy of 50.000 heures
- Energy supply 110-220V, autonomous stabilized converter





## **Image**



- Camera Autofocus
- Lens : zoom 60x
- Considerable depth of field
- System : NTSC / PAL
- Number of pixels: 1080p (1080 x 1920)/60p
  Horizontal field of vision: 48° to 2,8°
  Low need of illumination: 0,7 lux
- White balance : automatic, indoor, outdoor
- Video Outputs : YPbPrPower waste : 6 12V DC, 3.3W

## Whole set

• Dimensions of the head: 272 x 116 x 146mm (without handles)

Weight of the head: 1,75 kgScale of the arm: 1470mm • Weight of the arm : 6,90 kg • Diameter of axis : 35mm

• Color RAL 9016

Foldaway handles

• The set is delivered with arms

• Warranty 1 year

