



MANUFACTURED  
IN EUROPEAN UNION



# Digital Slit Lamp

## SL-100

## SL-100 Lamp - Advanced LED DIGITAL Slit Lamp Microscope.

Powerful combination to visualize, improve workflow and share results.

FREY SL-100, advanced digital slit lamp microscope is designed for high performance, accurate diagnostics, reliability and patient comfort. Brilliant optics result in stunning image quality and resolution. An innovative LED illumination system with integrated eye illumination and digital camera delivers superb clinical viewing. FREY SL-100 digital slit lamp provides unique quality with fully integrated design already at manufacture stage and does not require external PC.

Implement efficient, high-level work flow and integration into clinical practice, with less complicated and more integrated device.

### Digital camera ready

Frey SL-100 integrates specialized componentry to connect and control Frey bespoke digital imaging system. Push button joystick and eye illumination system controls are elegantly integrated. Simply add digital camera system allowing clinicians to enjoy outstanding ergonomics and complete control over the imaging process clinical examination.

### LED illumination system

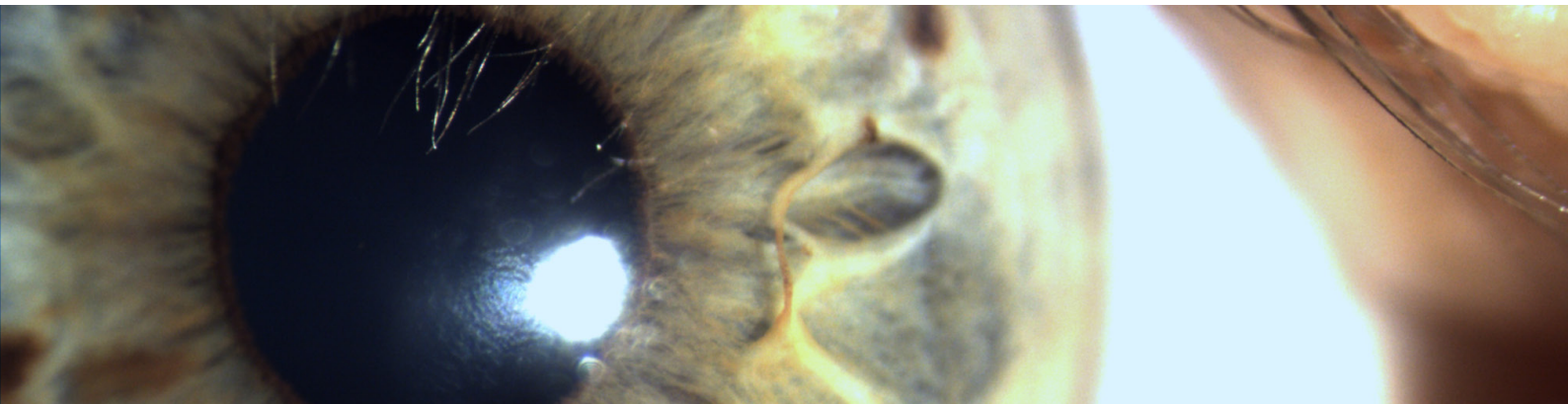
The LED illumination source eliminate heat and infra red emissions associated with traditional light sources and ensures optimal diagnostic detail from the cornea to the retina. LED exhibits superior duty cycle and reduces medical device maintenance and downtime significantly. LED light intensity is precise and easy to use, delivering a sharp and bright slit for superior performance and control.

### Improve clinical workflow

Superb mechanics, Frey SL-100 is very easy to operate. Frey combines modern design and enduring performance providing the clinician with fatigue free examinations every day. Yellow contrast enhancing filter for additional contrast is cleverly integrated into the optical body of the microscope, and can be subtly operated for viewing corneal staining.

### Stream to multiple screens

Stream images and videos across multiple devices. FREY SL-100 allows you to collaborate with other health care professionals, share knowledge and discuss diagnosis, improve clinical outcomes in real time, easily. Ideal for general practices, educational and training institutions. Video streaming and photo sharing enhance clinical collaboration and education.



### Stunning AMOLED tech

AMOLED screen provides superb image quality - better contrast, higher brightness, fuller viewing angle, a wider colour range to capture even the greatest detail of the eye. AMOLED consume less power, enables Frey to simplify the unique design that is ultra-thin with better durability.

### Work wirelessly

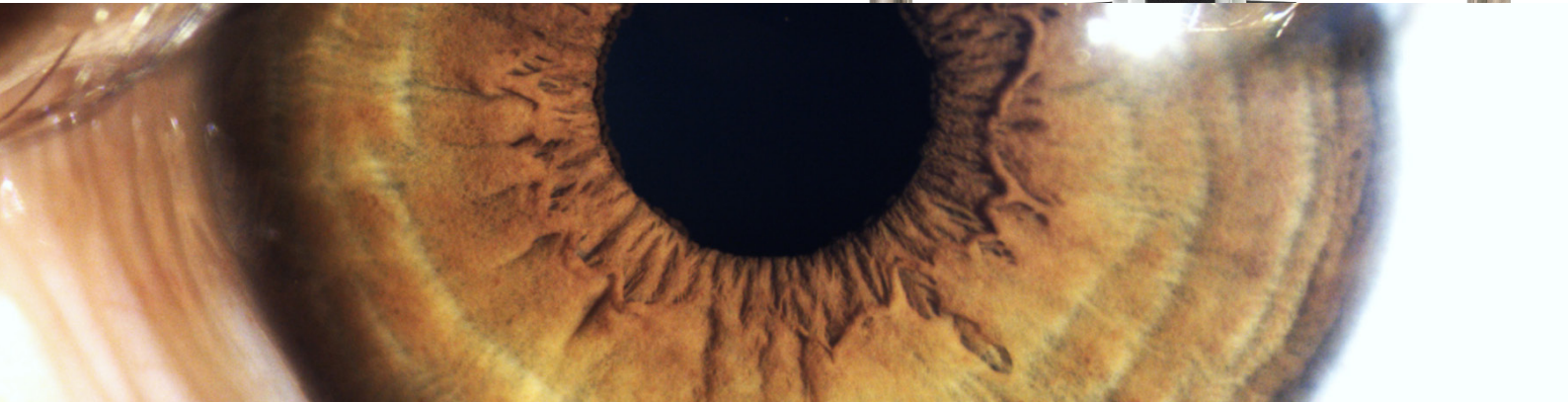
Use fast, stable and reliable Wi-Fi AC or Bluetooth 4.2 to connect all your devices. Simplify workspace and improve clinical workflows.

### Out of the box & stand alone

Frey SL-100 does not require external PC or any other device to operate. All cables remain hidden in an ergonomic and minimalistic design. The eye lighting system, which can be controlled using the knob built into the lamp base, is included.

### Large & reliable internal storage

Result and image management is an essential part of doctor's workflow. FREY SL-100 simplifies and speeds up the work with 128GB internal storage. Gather a large number of heavy files. Select, the most interesting photos and sent them to you smartphone - without cluttering it.



## Technical specification and devices details.

| Slit, Projection system and Base general data       |  | SL-100 Digital Slit Lamp |     |     |     |  |
|---|--|--------------------------|-----|-----|-----|--|
| Minimum slit opening                                | 0 mm   |                          |     |     |     |  |
| Slit maximum length                                 | 16 mm  |                          |     |     |     |  |
| Continuously adjustable slit length                 | 1.1 - 16 mm continuously variable                        |                          |     |     |     |  |
| Slit projection scale                               | 1.2 x  |                          |     |     |     |  |
| Slit aperture diaphragms                            | 0.3/ 1/ 3/ 5/ 9/ 1 mm                                    |                          |     |     |     |  |
| Filters   | clear, blue, natural density, yellow, diffuser, red-free |                          |     |     |     |  |
| Slit rotation                                       | 0° - 180° with reference scale                           |                          |     |     |     |  |
| Vertical slit tilting angles                        | 0°/ 5°/ 10°/ 15°/ 20°                                    |                          |     |     |     |  |
| Slit projection angle                               | 90° - 0° - 90° with reference scale                      |                          |     |     |     |  |
| Working distance<br>- eye of patient/ prism surface | 75 mm  |                          |     |     |     |  |
| Fixation lamp                                       | green lamp   |                          |     |     |     |  |
| Chin-rest height adjustment                         | 59 mm  |                          |     |     |     |  |
| Base travel   | 103 mm X-axis, 100 mm Y-axis, 35 mm Z-axis               |                          |     |     |     |  |
| Stereoscopic Microscope                             |  |                          |     |     |     |  |
| Microscope type                                     | Convergent binocular optical microscope @ 8°             |                          |     |     |     |  |
| Magnification power selection system                | Five position rotating drum                              |                          |     |     |     |  |
| Eyepiece  | 12.5 x   |                          |     |     |     |  |
| Magnifying powers                                   | 6x   | 10x                      | 16x | 25x | 40x |  |
| Field of view [mm]                                  | 36   | 22                       | 14  | 9   | 5.6 |  |
| Distance between pupils                             | 48.5 - 80 mm   |                          |     |     |     |  |
| Objective lens working distance                     | 111 mm   |                          |     |     |     |  |
| Objective lens working angle                        | 12°  |                          |     |     |     |  |
| Eyepiece diopter adjustment                         | from -5D to +5D  |                          |     |     |     |  |
| Camera  |  |                          |     |     |     |  |
| Screen  | AMOLED 5' touch screen                                   |                          |     |     |     |  |
| Sensor  | CMOS Image Sensors with a 3.45 µm Pixel                  |                          |     |     |     |  |
| Memory  | 128 GB internal high endurance flash storage             |                          |     |     |     |  |
| Image processing technology                         | HDR, Global Shutter Function                             |                          |     |     |     |  |
| Photo resolution                                    | 2048x1536 px   |                          |     |     |     |  |
| Movie resolution                                    | 960x720 px   |                          |     |     |     |  |
| Communication                                       | Bluetooth 4.2, Wi-Fi AC                                  |                          |     |     |     |  |
| Depth of colour                                     | up to 12 BPP   |                          |     |     |     |  |
| Other features                                      | Video streaming to multiple devices                      |                          |     |     |     |  |
|   | Photo & video capture                                    |                          |     |     |     |  |
|   | Automatic L/R eye detection                              |                          |     |     |     |  |