Lumenis Smart LIO™
Advanced Laser Indirect Ophthalmoscope

Lumenis is proud to present the Smart LIO™, its newest high-end Laser Indirect Ophthalmoscope. Smart LIO™ offers a new standard of comfort and reliability:

**Ergonomic**
Lightweight and well balanced for maximal comfort.

**Wireless**
Unique patented wireless technology.

**Smart Illumination, Filters and Apertures**
Illumination rheostat is located on the headband, providing easily accessible, fully controllable light. In addition, the Smart LIO™ has 4 different light filters and 3 aperture sizes (see back cover).

**Triple Wavelength Support**
Superior optics supporting green, yellow and red wavelengths in one LIO.

**Patented Intelligent Optical System (IOS)**
Ensures that as aperture size changes, the mirror and optics automatically adjust and converge.

**LED Illumination**
Bright and white LED illumination provides improved retina visibility and allows for longer battery life.
The new Smart LIO™ is compatible with all Lumenis photocoagulators and multi-application platforms, allowing you to use one LIO for all your retinal care needs:

Smart532™: green photocoagulator with SmartPulse™ sub-threshold technology.

Vision One

Multi-color photocoagulator. Allows you to choose any desired combination of green (532nm), yellow (577nm) or red (659nm) wavelengths, for optimal clinical outcomes.

Smart SELECTA Trio

SLT + YAG + Smart532™. The comprehensive solution for ophthalmic practice, providing glaucoma, secondary cataract and retinal therapy within a single unified platform.
### Illumination Filter Selection

- **White Light** - Clear settings with no filter. Recommended for inspection of a specific pathology and when a brighter light is desired.
- **Green Filter** - Red free filter. Used for examination of fine blood vessels and identification of microaneurysms.
- **Blue Filter** - Cobalt blue filter for fluorescein angiography.
- **Diffuser** - Extra wide beam of diffused light permits a more relaxed technique during more challenging fundus examinations.

### Illumination Aperture Sizes

- **Large** - Suitable for routine examinations through fully dilated pupils.
- **Intermediate** - Designed to reduce reflections when entering a partially or poorly dilated pupil. Also ideal for closer inspection of particular fundal areas.
- **Small** - Ideal for small, undilated pupils.

### Smart LIO™ Specifications

#### LIO Headset

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Binocular indirect ophthalmoscope</td>
<td>Modified Keeler</td>
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<tr>
<td>Headset dimensions (all dimensions adjustable)</td>
<td>Height: 22 cm (8.7 in)</td>
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<tr>
<td>Headset weight</td>
<td>800 g (1.75 lb)</td>
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<tr>
<td>Optical fiber length</td>
<td>5 m / 16.4 feet</td>
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#### Ophthalmoscope Technical Specifications

- **Illumination intensity**: 3500 Lux ±500*  
- **Illumination patch sizes**: 20/40/60 mm ±10%*  
- **Interpupillary adjustment**: 48 to 76 mm

#### Power Supply

- **Input mains power**: 100-240 VAC, 700 mA, 50-60 Hz  
- **Power supply rating**: 12V: 2.5 A (PSU only)

#### Compatible Lumenis Lasers and Usable Wavelengths (with Appropriate Eye Safety Filters)

- **Spectra / Spectra DP**: 532 nm (green); 630–680 nm (aiming beam)  
- **Smart532**: 532 nm (green); 635 nm (aiming beam)  
- **Vision One**: 532 nm (green); 577 nm (yellow); 659 nm (red); 635 nm (aiming beam)

#### Working Distances

- **Approximately 28 cm (11 in)**: Defined as the distance from the center of the LIO laser mirror to the image of the retina.

* Measurements taken at 440 mm from the front surface of the SmartLIO