

# 3-STEP SLIT LAMP MICROSCOPE

Professional Ophthalmic Diagnostic Instrument • Technical Specification Sheet

**Precision in Eye Diagnostics:** A high-performance Galilean-type optical slit lamp engineered for advanced anterior and posterior segment examinations. Featuring versatile 3-step magnification rotation, long-life white LED illumination, and responsive XYZ joystick integration for busy clinical environments.

## CORE FUNCTIONAL OVERVIEW

The 3-Step Slit Lamp Microscope comprises a high-intensity clinical light source paired seamlessly with an advanced binocular biomicroscope. This optical system delivers precision illumination focused into a variable slit. It facilitates comprehensive diagnostic visualization of both structural regions: the **Anterior Segment** (eyelids, sclera, conjunctiva, iris, cornea, and natural crystalline lens) and the **Posterior Segment** of the human eye.

## TECHNICAL SPECIFICATIONS

<b>Instrument Type</b>	Diagnostic Ophthalmic Equipment
<b>Microscope Optical Design</b>	Galilean Type
<b>Magnification Changer</b>	3-Step Rotation (10x, 16x, and 25x)
<b>Eyepiece Configurations</b>	10x / 16x Widefield (Standard Package includes Wide Field 12.5x)
<b>Interpupillary Distance (IPD) Range</b>	48.5 mm – 80.0 mm
<b>Dioptric Adjustment</b>	± 6 D
<b>Slit Width / Length</b>	Continuously variable from 0 mm to 14 mm
<b>Slit Apertures</b>	Ø 0.2, 5, 8, 10, 12 mm, and infinitely variable wedge-shaped diaphragm
<b>Slit Rotation Angle</b>	0° to 180° continuous
<b>Illumination Source</b>	High-Intensity White LED (Up to 50,000 Hours life) / 6V 20W Halogen alternative support
<b>Built-in Optical Filters</b>	Cobalt Blue, Red-Free (Green), Heat-Absorbing, Neutral Density
<b>Mechanical Adjustments</b>	Integrated feather-touch XYZ joystick; Patient Chin Rest travel up to 70 mm
<b>Power Configuration</b>	Universal AC Input: 110V – 240V (50/60 Hz)   Consumption: 40W   CE Certified
<b>Build Quality &amp; Form Factor</b>	Stationary, non-portable unit; Heavy-duty structure with an elegant Powder-Coated Matte Finish
<b>Physical Weight</b>	25.0 Kg (Net Base Assembly weight)

## KEY PERFORMANCE FEATURES

- **Ergonomic Architecture:** Smooth, specialized structural framing optimized for patient fatigue reduction during lengthy diagnostics.
- **Enhanced Optical Alignment:** High-grade lens multi-coating yields clear, exceptional image fidelity and depth of field.
- **Dynamic Slit Versatility:** Swift modification choices across dedicated diagnostic apertures and precision mechanical wedge sweeps.
- **System Modular Compatibility:** Fully pre-engineered to seamlessly interface with modern digital imaging setups and video units.

## SYSTEM ACCESSORIES

### Standard Included Accessories

- 15x Eyepieces
- Plastic Breath Shield
- Custom Fit Dust Cover & Fuse Kit
- Optical Alignment Testing Rod

### Optional Modular Add-ons

- High-Resolution CCD Camera Module
- Optical Beam Splitter Attachment
- Motorized Power Table / Specialized Mechanical Base

## FREQUENTLY ASKED QUESTIONS (FAQ)

### Q: How is the magnification modified on this 3-step variant?

A: Practitioners can effortlessly alternate through the precise 10x, 16x, and 25x magnification fields simply by adjusting the ergonomic continuous rotation knob located directly below the binocular visual pod.

### Q: What specific clinical diagnostic roles do the integrated filters fulfill?

A: The Cobalt Blue filter tracks localized corneal fluorescein staining patterns; the Red-Free (Green) filter optimizes vascular contrast pathways; the Heat-Absorbing and Neutral Density modules protect tissue by mitigating light intensity and caloric transfers.

### Q: What are the advantages of opting for LED lighting architecture?

A: The advanced 40W white LED engine ensures sharp, un-tinted clinical viewing with zero structural heat discharge toward the patient, while lowering long-term facility overhead through its ultra-extended 50,000-hour operational life cycle.

### Q: How do operators reposition the patient height frame?

A: The system provides an robust manual adjust dial linked directly to a patient chin rest mechanism featuring a generous 70 mm vertical travel allowance to seamlessly fit varied patient sizes.

### Q: Is this system capable of transport or battery deployment?

A: No. This diagnostic system is designed as a rigid, stationary medical installation requiring standard 110V-240V electric wall lines. It is neither collapsible, rechargeable, nor portable.