Trinocular Biological Microscope, Phase Contrast

Model **MSBS2047TSWISS, MSBLC450SWISS** | Brand **Master Science** | Unit **Pc**



Trinocular Phase Contrast Microscope



Are you struggling with low-contrast, transparent specimens that are difficult to visualize and document with standard microscopy? Unlock a new level of clarity and efficiency in your laboratory with our advanced Trinocular Phase Contrast Microscope System. This integrated solution is engineered for researchers and lab technicians who demand uncompromising precision, durability, and seamless digital documentation.

Request a Quotation
Contact us for pricing, configuration options and delivery details.

support@themsci.com
www.themsci.com

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Overview

- Solution: Advanced Phase Contrast optics instantly enhance contrast in transparent samples, revealing intricate cellular structures without the need for staining, which can alter or kill live specimens.

Invest in a microscope system that works as hard as you do. Enhance your research capabilities, improve documentation accuracy, and experience a new standard in laboratory efficiency.

Key Features

ROBUST AND ADAPTABLE FOR DEMANDING ENVIRONMENTS

From the high-hardness, corrosion-resistant ceramic stage to the flexible LED illumination with ECO power-saving functions, every component is selected for durability and long-term performance in teaching, medical testing, and biomedical research labs.

Technical Specifications

GENERAL	
General	Elevate Your Research with PrecisionTrinocular Phase Contrast Microscope & HD Imaging System
General	Pain PointInstrument downtime due to delicate construction or power limitations.
General	Optical SystemInfinite Color Corrected System for superior image fidelity.
General	Image SensorA high-sensitivity 1/2.5" CMOS sensor ensures excellent light capture.
General	Pain PointPoor visualization of unstained, live cells (like blood cells, bacteria, or protozoa) leading to missed details and inefficient analysis.
General	Pain PointCumbersome and unreliable transition from observation to digital documentation and measurement.
General	Pain PointErgonomic discomfort and lack of flexibility during long research sessions.
General	Microscope (MSBS2047TSWISS)
General	Viewing HeadA 30° inclined, 360° rotatable trinocular head with an adjustable interpupillary distance of 48–76mm and a 50/50 splitting ratio for simultaneous viewing and imaging.
General	EyepiecesHigh-eye-point, wide-field PL10X/22mm eyepieces with a generous 22mm field of view and adjustable diopter.
General	ObjectivesA quintuple nosepiece houses infinity plan achromatic phase contrast objectives including 10x, 20x, 40x (spring), and 100x (spring, oil). The system includes dedicated phase contrast insert plates for 10x–40x and 20x–100x objectives.
General	Mechanical StageA large double-layer ceramic stage (210mm x 171mm) offers precise, rackless movement with an accuracy of 0.1mm. The moving range is 78mm x 51mm for comprehensive specimen navigation.
General	CondenserA high-performance N.A. 1.25 Abbe condenser with an aperture diaphragm and slots for phase contrast and dark field accessories.
General	Focusing SystemA low-position coaxial knob system provides both coarse and fine focusing. The fine focus achieves a remarkable precision of 2 micrometers, with elastic adjustment and upper limit protection.
General	IlluminationA bright, cool 3W LED with continuous intensity control and a color temperature of 4750K–5500K. It features versatile power via a 100V–240V adapter or a portable battery through a Type-C interface. An ECO mode automatically powers down the system after 30 minutes of inactivity.
General	HDMI Digital Camera & LCD Display (MSBLC450SWISS)
General	ResolutionCapture detailed 5.0 Megapixel static images (2592 x 1944) and smooth 1080p Full HD video at 15 frames per second.
General	DisplayA vibrant 11.6-inch IPS-Pro Retina screen with a 1920 x 1080 resolution, 320 cd/m² brightness, and a 1000:1 contrast ratio provides a sharp, real-time view of your samples.
General	Connectivity & ControlOutput via HDMI or USB2.0. A standard C-mount ensures easy attachment. Control the system with an included mouse and save directly to the included 4GB SD card or a connected PC.
General	Software SuiteThe powerful PC software, Capture2.0, enables live measurement, annotation, focus stacking, image stitching, HDR, and flat field correction for professional-level image analysis. Compatible with Windows and Mac OS.

ADDITIONAL INFORMATION

Solution	The integrated trinocular head and dedicated HD camera system allow you to simultaneously observe with your eyes and capture high-resolution images and video directly to an SD card or PC, streamlining your workflow.
Solution	An adjustable viewing head, high-eye-point eyepieces, and a low-position coaxial focus system ensure comfortable, strain-free operation for all users.
Solution	Built with anti-rust materials, a robust ceramic stage, and featuring versatile power options (including a portable battery), this system is designed for relentless reliability in demanding lab environments.

Applications

- **Live Cell Imaging and Biomedia Research**
- **Hematology (Blood Cell Analysis)**
- **Microbiology (Bacteria, Protozoa Observation)**
- **Pathology and Cytology**
- **Teaching and Educational Experiments**
- **Semiconductor and Defect Analysis**

Contact us today to request a quote or a personalized demonstration.