SMT-100 Digital Video Microscope

- PC powered portable digital microscope
- High-resolution 1.3 megapixel camera
- Software to capture, annotate, measure
- Extended Depth of Focus with optional FocusLock™ plug-in

The SMT Digital Video Microscope is a research grade video microscope system that can be completely powered by a laptop computer. The 1.3 megapixel color camera provides four times the resolution of a standard video camera with excellent color reproduction and high sensitivity over a wide range of magnifications. The standard zoom lens provides a 9 — 65x magnification range (other magnification ranges available). The variable intensity LED ring light provides uniform illumination in the laboratory, while the PC powered light bar provides bright white lighting when out in the field.

Video ToolBox software is included, providing an easy-to-use interface for image and movie capture, advanced labeling, annotation and measurement. Video ToolBox also supports plug-in such as FocusLock™ — the software tool for extending depth-of-focus. Even add GPS to automatically record the exact location an image is captured.

The SMT Digital Video Microscope is DirectShow and TWAIN compliant, so it is compatible with hundreds of other imaging programs which support those formats.

Specifications: SMT1-001 Digital Video Microscope

Optical
- Magnification: 9 — 65x (other ranges available)
- Field of View: 0.90” x 0.67” at 9x
  0.14” x 0.10” at 65x
- Standoff: 3.75” to lens
  2.75” to ring light

Camera
- Array Size: 1280 x 1024 (1.3 megapixels)
- S/N Ratio: 54 dB
- Min. Illumination: 0.028 lux
- Frame Rate: 14.33/sec. (1280 x 1024)
  30/sec. (640 x 480)
- Interface: USB 2.0

Illumination
- Laboratory: Variable intensity LED ring
- Portable: USB powered LED bar light

Software
- Capture Program: Video ToolBox
  (see back for software features)
- Drivers: DirectShow and TWAIN compliant

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Sample Images

Software Features

- Display live video
- Capture still images, movies and time lapse sequences.
- Interactively adjust camera brightness, contrast and color.
- Live digital zoom up to 4x.
- Resizable image window — up to full screen
- Measure on the live image using multiple measurement tools.
- Calibrate for different magnifications — store and recall up to 8 different calibrations.
- Add labels and markers over the live image. Drag to move.
- Draw freehand on the live image
- Place a time stamp anywhere on the image.
- Capture images directly into your favorite photo editor for further enhancement.

FocusLock™ Plug-in for Video ToolBox — Depth-of-focus enhancement

FocusLock performs real-time focus enhancement by monitoring the video image and capturing every portion of the image which is in focus. All you do is turn the focus knob; FocusLock monitors the video image and captures the in-focus portions. Finally, FocusLock returns an image which is everywhere and entirely in focus.

Computer Requirements:

- Windows 2000/XP
- Free USB 2.0 Port
- DirectX 8.1 or greater
- Pentium III 1.0 GHz or faster (P4, 1.5+ GHz recommended)
- 128 MB of Free Memory (256+ MB recommended)
- Video card with 16 MB of video RAM, minimum 800 x 600 resolution at 16-bit (65,000 colors)

Accessories:

VTB-FL FocusLock plug-in for Video ToolBox
VTB-GPS GPS option with software and antenna
SMT-HC Watertight hard travel case for ZDM
SMT-ARM Adjustable flexible arm with table mount