## **Electron microscopy for professionals**

## See beyond the power of light.

Phenom-World helps you see beyond the limits of optical instruments with the Phenom™ personal electron microscope. With 20 times the magnification of a conventional light microscope, the Phenom combines high resolution imaging with extreme ease-of-use. Engineers, researchers, educators and students can make high-quality sub-micron images with as little as 10 minutes of training.

The Phenom is ideal for detailed imaging of sub-micron particles, fibers, microtools, electronic components and more. The optical camera, motorized stage and touch-screen user interface work together to help you easily navigate to a region of interest from a 24x "bird's eye view". Simply tap the place on the optical image that you want to investigate, and the stage automatically centers on that region of interest. Then switch to high resolution electron imaging in seconds with the touch of an icon. Navigate in this mode the same way as in the optical mode, and zoom up to 24,000x by simply turning a rotary knob. Save your images on a USB memory stick or network storage location for off-line analysis and distribution.

The Phenom can handle a wide range of samples with minimal preparation. Sample loading is very easy and safe due to our patented vacuum load-lock technology. High resolution electron images are ready within 30 seconds.

The Phenom is the most professional solution for your imaging needs.









Light OpticalElectron Optical

Illumination

Light Optical

· Electron Optical

Digital Image Detection

Light Optical

· Electron Optical

Image Format

■ Image Resolution Options

Data Storage

Sample StageSample Size

Sample Loading Time

Light Optical

· Electron Optical

■ Dimensions & Weight

· Imaging module

· Diaphragm vacuum pump

Power supply

• Monitor

Room Temperature

Humidity

Power

Recommended Table Size

Description

Imaging module, 17" touch screen monitor, rotary knob, diaphragm vacuum pump, power supply, USB 2.0 flash drive

Magnification fixed: 24x

Magnification range: 120x to 24,000x

Digital zoom: max. 12x

Selectable axial and off-axis LEDs Long lifetime thermionic source (5 kV accelerating voltage)

Color CCD camera

High sensitivity backscatter electron

detector (compositional and topographical modes)

JPEG, TIFF, BMP

456 x 456, 684 x 684, 1024 x 1024 and

2048 x 2048 pixels USB 2.0 Flash drive

Computer controlled motorized X and Y

25 mm (dia) x 30 mm (h)

< 5 s

< 30 s

286 mm x 566 mm x 495 mm (w x d x h), 50 kg 145 mm x 220 mm x 213 mm (w x d x h), 4.5 kg 156 mm x 300 mm x 74 mm (w x d x h), 3 kg 375 mm x 203 mm x 395 mm (w x d x h), 4.6 kg

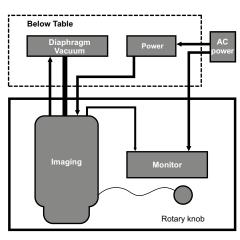
15 °C ~ 30 °C (59 °F ~ 86 °F)

< 80 %RH

Single phase AC 110 - 240 Volt,

50/60 Hz, 300 W (max.)

120 cm x 75 cm, load rating of 100 kg



Phenom configuration

Table 120 cm x 75 cm