

Designed for faster, better, easier fiber analysis

Turning insight into value

Now, direct observation and measurement of micro and nano fibers is faster, better and easier than ever before. With the Fibermetric™ System you can load and image samples in about 30 seconds. Magnifications up to 24,000 times produce accurate information on a large range of fibers as small as 100nm in diameter. Automated measurement generates all the statistical data you need in minutes, and unlike other SEM-based solutions, no laboratory infrastructure or trained microscopist are required.

- **Save time**
- **Get all your statistical data, automatically**
- **See and measure nearly any micro/nano fiber**

The Fibermetric System is a new member of the Phenom™ family, the world's first personal electron microscopes. These high resolution desktop imaging systems are easy to operate; everyone on your team can now see beyond the power of light to generate more accurate measurement data, faster than ever before. With its affordable price, ease-of-use, speed and accuracy, the Fibermetric System gives you a rapid return on investment and a sustainable competitive advantage.

Automated measurement

CFM – Click Fiber Measure. This feature will determine automatically if the image elements selected are fibers or pores. For fibers, it will measure thickness. For pores, it will measure the enclosed surface area. AIC – Automated Image Characterization. After manual selection of an area of interest on the image, automated measurements of fiber diameter and pore surface area are readily available. The area of interest can be the entire image or any area selected from the image by the user.

The Fibermetric System is powered by the Phenom.



FIBERMETRIC™ 

Specifications

Items

● System

● Imaging Modes

- Light Optical
- Electron Optical

● Fiber Detection

● Illumination

- Light Optical
- Electron Optical

● Digital Image Detection

- Light Optical
- Electron Optical

● Image Format

● Image Resolution Options

● Data Storage

● Sample Stage

● Sample Size

● Sample Loading Time

- Light Optical
- Electron Optical

● Dimensions & Weight

- Imaging module
- Diaphragm vacuum pump
- Power supply
- Touch screen monitor
- Fibermetric module

● Room Temperature

● Humidity

● Power

● Recommended table size

Description

Imaging module, 17" touch screen, 17" monitor, Keyboard and mouse, "Eee Box" PC (with Ethernet, Windows XP), Diaphragm vacuum pump, Power supply, USB 2.0 flash drive

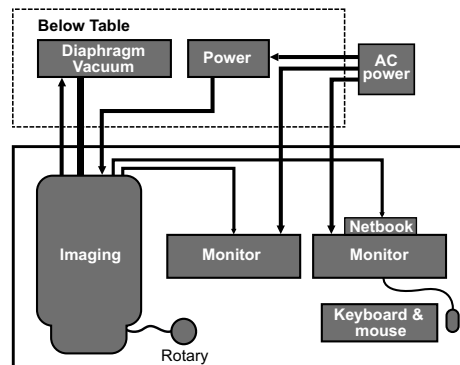
Magnification fixed: 24x
Magnification range: 120x to 24,000x
100 nm to 20 μm

Selectable axial and off-axis illumination
Long lifetime thermionic source

CCD camera
High sensitivity backscatter electron detector (multi-mode)
JPEG, TIFF
456 x 456 pixels, 684 x 684 pixels, 1024 x 1024 pixels, 2048 x 2048 pixels
USB 2.0 Flash drive and/or network storage
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
355 mm x 340 mm x 203 mm (w x d x h), 4.6 kg
355 mm x 340 mm x 203 mm (w x d x h), 5.5 kg
15 °C ~ 30 °C (59 °F ~ 86 °F)
< 80 %RH
Single phase AC 110 - 240 Volt, 50/60 Hz, 300 W (max.)
Total of 4 wall outlets are required
120 cm x 75 cm, load rating of 100 kg



Fibermetric System configuration

Table 150 cm x 75 cm