

# Phenom™ G2 pro

By using the customer's input and through continuous research, Phenom-World continuously strives to increase the value of the Phenom™ desktop SEM for its users. Phenom-World introduces regular improvements in both hardware and software to ensure that customers obtain the required information from the Phenom system in the most effective way.

## Phenom G2 pro

Phenom-World is focused on enabling you to keep up with continuously shrinking feature-sizes and increase your productivity, while bringing down the costs of analysis. The Phenom G2 pro is the most effective, versatile and fastest desktop SEM available. Its unique design makes it suitable for use in a large variety of applications and markets.

The Phenom G2 pro is the most advanced model in the Phenom series. With improved detection hardware, a new electron source and a new navigation camera, it has become the most powerful desktop SEM. The zoom functionality of the navigation camera reduces the gap between optical and SEM imaging. The SEM magnification range has been increased and now extends from 80 to 45,000 times.

The combination of a touch screen and the option of working with an optical mouse, allows even faster and more accurate navigation with the Phenom G2 pro.

Phenom G2 pro is the platform that offers automated and mechanized accessories such as Pro Suite and active sample holders.

Pro Suite is an application system that has been developed to further enhance the capabilities of the Phenom system. Pro Suite enables maximum information to be extracted from images obtained on the Phenom system. It offers multiple solutions to specific application needs. Pro Suite is a platform containing standard applications such as MeasureIT, Automated Image Mapping and Remote User Interface. Additional applications are Fibermetric and 3D Roughness Reconstruction. Virtually all the properties of a sample can be revealed using the Phenom G2 pro and Pro Suite.

**The Phenom G2 pro is a high-end solution suitable for use with a large range of sample holders in a multitude of applications.**



## Specifications

### Items

### Description

- System  
Imaging module, 19" touch-screen monitor, rotary knob, mouse, diaphragm vacuum pump, power supply, USB 2.0 flash drive
- Imaging Modes
  - Light Optical  
Magnification: 20 - 120x
  - Electron Optical  
Magnification range: 80 - 45,000x  
Digital zoom: max. 12x
- Illumination
  - Light Optical  
Selectable axial and off-axis LEDs
  - Electron Optical  
Long-lifetime thermionic source
  - Acceleration Voltage  
5 kV
  - Resolution  
25 nm
- Digital Image Detection
  - Light Optical  
Color Navigation Camera
  - Electron Optical  
High-sensitivity backscattered electron detector (compositional and topographical modes)
- Image Format  
JPEG, TIFF, BMP
- Image Resolution Options  
456 x 456, 684 x 684, 1024 x 1024 and 2048 x 2048 pixels
- Pixel Resolution  
2.9 nm
- Data Storage  
USB 2.0 Flash drive
- Sample Stage  
Computer-controlled motorized X and Y
- Sample Size  
25 mm (dia) x 30 mm (h)
- Sample Loading Time
  - Light Optical  
< 5 s
  - Electron Optical  
< 30 s
- Dimensions & Weight
  - Imaging Module  
286 (w) x 566 (d) x 495 (h) mm, 50 kg
  - Diaphragm Vacuum Pump  
145 (w) x 220 (d) x 213 (h) mm, 4.5 kg
  - Power Supply  
156 (w) x 300 (d) x 74 (h) mm, 3 kg
  - Monitor  
375 (w) x 203 (d) x 395 (h) mm, 7.9 kg
- Ambient Temperature  
15°C ~ 30°C (59°F ~ 86°F)
- Humidity  
< 80 % RH
- Power  
Single-phase AC 110 - 240 Volt, 50/60 Hz, 300 W (max.)
- Recommended Table Size  
120 x 75 cm, load rating of 100 kg

