

# 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.

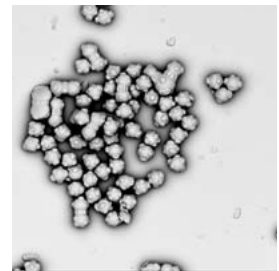
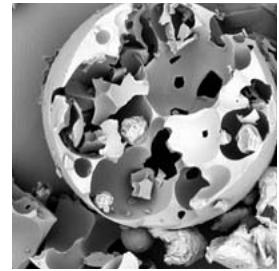
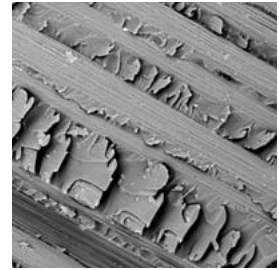
**The Phenom G2 pro is a high-end solution suitable for use with a large range of sample holders in a multitude of applications.**



## Specifications

### Items

- 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



**Lambda**  
photometrics