

# Phenom™ G2 pure

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 pure

The Phenom G2 pure is an ideal tool for making the transition from working with a light microscope to operating an electron microscope. The Phenom G2 pure is equipped with the basic components for meeting imaging needs.

The Phenom G2 pure provides high-quality images while using basic features, and offers the market's fastest loading and imaging time. Newly developed hardware makes it even easier to generate high quality images. The very reliable autofocus and automated source alignments make it the most user-friendly system on the market. The Phenom G2 pure is the most economic and efficient solution for high-resolution imaging. The worry-free maintenance and remote assistance are unique in its product category and maximize system uptime.

With more than 15 times the magnification of a conventional light microscope and large depth of focus, the Phenom G2 pure combines high-resolution imaging with extreme ease-of-use. The navigation camera in the Phenom G2 pure provides information that helps the operator to make a link between the optical and electron-optical images.

Users are ready to take images after only 10 minutes of basic training. A large variety of sample holders is available for the Phenom G2 pure to adapt any kind of sample. Sample loading is fast and safe due to our patented sample vacuum loading technology. The optical camera, motorized stage and touch-screen user interface work together to help you navigate swiftly to any region of interest. Just touch the position you want to investigate on the optical image and the stage automatically centers the region of interest. Switching to electron imaging mode is fully automated and fast at the touch of just one button. A high resolution image is available within 30 seconds after loading the sample. Saving images is practical and easy on a USB memory stick or network storage location for off-line analysis and distribution.

The Phenom G2 pure can be upgraded to a Phenom G2 pro in our service center. It will receive a full technical upgrade, enabling access to all advanced applications and specifications.

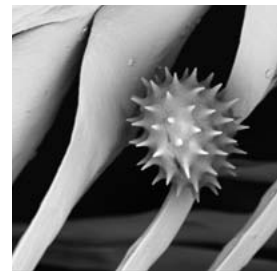
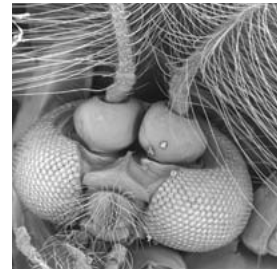
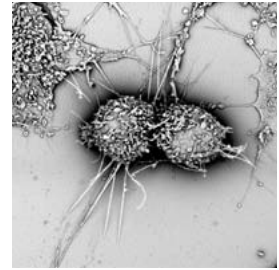
**The Phenom G2 pure is the most economic and efficient solution for high-resolution imaging.**



## Specifications

### Items

- System
  - Imaging module, 17" touch-screen monitor, rotary knob, diaphragm vacuum pump, power supply, USB 2.0 flash drive
  
- Imaging Modes
  - Light Optical
    - Magnification fixed: 20x
  - Electron Optical
    - Magnification range: 70 - 15,000x
    - Digital zoom: max. 12x
  
- Illumination
  - Light Optical
    - Selectable axial and off-axis LEDs
  - Electron Optical
    - Long-lifetime thermionic source
    - 5 kV
    - 30 nm
  
- Digital Image Detection
  - Light Optical
    - Black & white 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
  - 7.8 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, 4.6 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