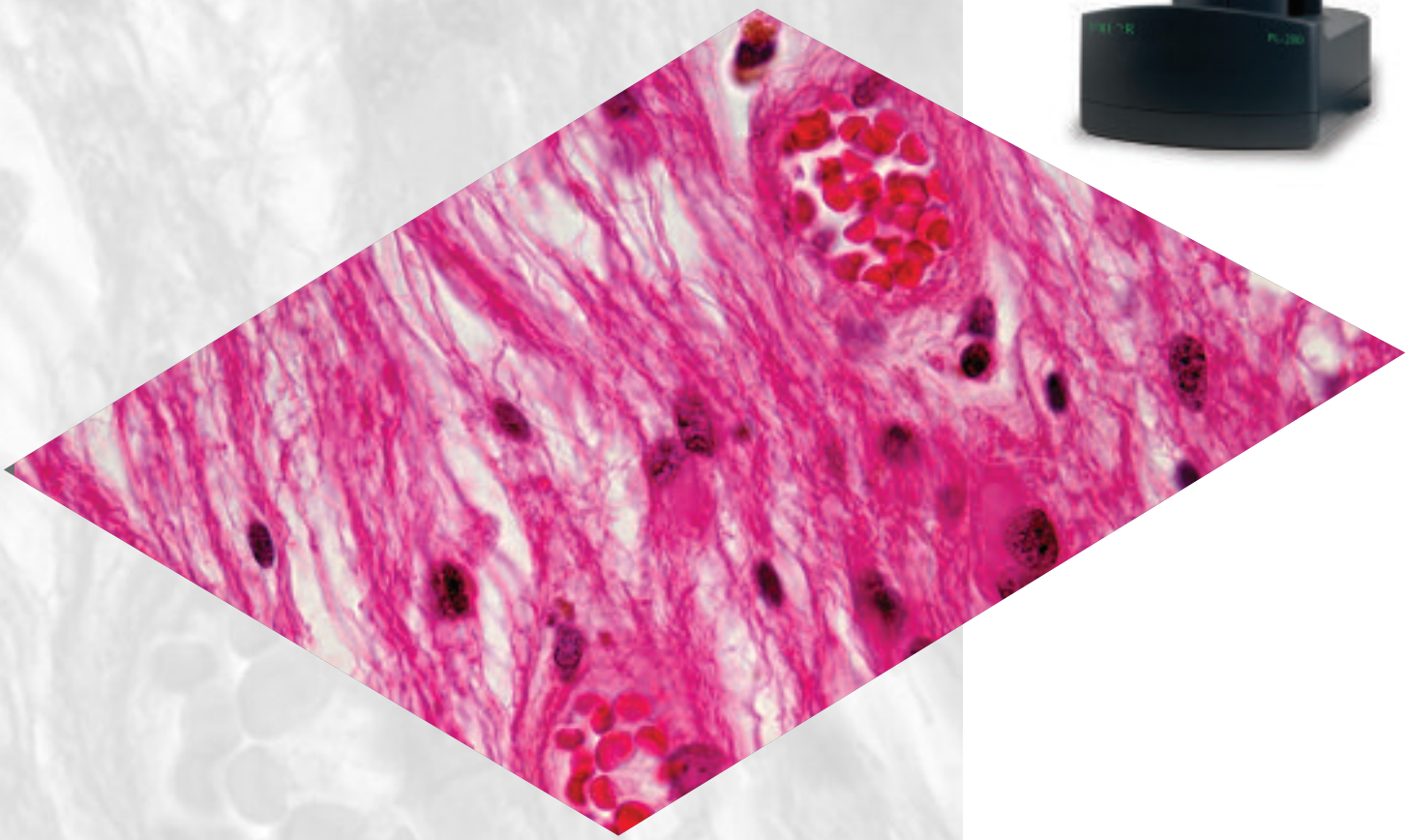
PL-100/PL-200 *Slide Loader*

PRIOR
Scientific

Automated Slide Loading System

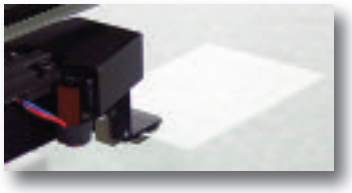


PL-100/PL-200 *Slide Loader Systems*

The **PL-100 and PL-200** Slide Loaders are advanced systems for automatic slide handling in a variety of microscope applications. Featuring higher slide capacity, smaller footprint and faster slide changing times, the units provides complete walk away convenience. Now it is possible to truly automate the digital imaging of microscope specimens using Prior's unique combination of precision scanning stage and automatic slide loader.

Slide Capacity

The **PL-200** unit accommodates up to four removable slide racks for 1x3 slides, each of which houses up to 50 slides for a total capacity of 200 slides. For 2x3 slides, the PL-100 accommodates two removable slide racks which house up to 50 slides for a total capacity of 100 slides. The slide racks are fitted with a convenient handle and a slide retaining design which means that slides can be moved around the laboratory in safety. Sensors on the units monitor the presence of the slide racks so the system can intelligently respond when racks are changed in the middle of a run for example. Upon detection of a newly installed slide rack, a unique slide detection system is able to automatically scan and identify the quantity of slides in the rack and their location.



The PL-100 unit has an impressive 100 slide capacity for 2" x 3" slides

Solvent resistant slide racks holds up to 50 slides

Higher Speed

Slide throughput is dependent on the loader and the automatic scanning stage. Because Prior is offering a complete package, both have been optimised to provide the highest productivity. Cycle times are dependent on several factors and typically fall in the range 20-25s but can be configured for cycle times as fast as 15s. For the vast majority of microscopy applications the system offers great savings in time and money.

Compact Design

A footprint of only 0.16m^2 (1.7ft^2) means the unit takes up a minimum of bench space thanks to the rotating arm design. This approach also minimizes vibration and noise which means the system can quietly go about its business of processing slides. Stability is ensured by the presence of a rigid, common baseplate for both the slide loader and the microscope.

Compatible and Upgradeable

From conception, the system has been designed to be compatible with the widest range of microscopes in use today. The units can be used with existing microscopes simply by adding the appropriate Prior motorized stage. For those instruments already configured with a Prior motorized stage, a simple field modification is all that is typically required to enable use in automated slide loading applications.

Slide Safety

Prepared specimen slides are precious, often unique, and need to be handled with care. In addition to the slide retaining design of the slide racks, a range of further safety features have been included in the system to minimize the risk of damage to slides. The slide gripper includes a sensor to detect the presence of a slide. If the state of this sensor changes due to an absent slide for example, the system will stop and report an error message. A similar approach is taken on the motorized stage where a sensor identifies if a slide is present on the stage. Slide scanning will not take place for example, if a slide is not successfully placed onto the stage. A third sensor is fitted to monitor changes in the vertical (focus) position of the stage. If the user adjusts focus intentionally or unintentionally, the unit will detect this height change and adjust the height of the slide loading position accordingly.

The precise slide gripper safely collects and returns slides

In addition, the presence of this height sensor allows the system to work seamlessly with advanced auto-focus routines which can then be used to maintain proper focus throughout the scan.

Bar code reader ensures data integrity

Data Integrity

To ensure that any data generated using the system is correctly associated with the correct slide reference details, and consequently to fulfil the requirements of Good Laboratory Practice (GLP), an optional bar code reader can be fitted. Two options are available depending on whether simple 1D barcodes or more complex 2D barcodes need to be read. The system is capable of reading all bar codes prior to starting the load cycle to enable random access scanning if required.

Software Integration

The **PL-100 and PL-200** are supplied with a comprehensive Software Development Kit that makes integration with 3rd party software packages very straightforwarf/ Bo beejujpobm bqqmjdbujpo jt jodmvefe gps uiptf fyjtujoh Qsjps customers using the Legacy RS-232 based command set.

Performance Specifications

• PL-100 Slide Capacity	100 slides - 50mm x 75mm (2"x3") Glass Slides in 2 racks of 50 slides each
• PL-200 Slide Capacity	200 slides - 25mm x 75mm (1"x3") Glass Slides in 4 racks of 50 slides each
• Loading Speed	Typically 20-25s
• Rack Sensor	Racks can be swapped while the unit is operating
• Slide Detection	Racks are scanned for slides present. Slides can be barcode read prior to loading for random access. Barcodes can also be read during the load cycle ensuring GLP compliance
• Slide Safety	Slide detectors are built into both the gripper arm and stage insert to ensure slides are handled correctly
• Barcode Readers	Optional 1D and 2D readers available
• Vibration	Loader is stationary between operations, eliminating vibration
• Communications	USB
• Scanning Stage Compatibility	Compatible with ProScan stages
• Footprint	Compact unit occupies only 0.16m^2 (1.7ft^2) of bench space
• Dimensions	35cm(W) x 50cm(D) x 68cm(H)
• Input Voltage	100 - 240v AC
• Regulatory compliance	Fully CE Compliant

Compatible Microscopes

The **PL-100 and PL-200** Slide Loaders are compatible with most Nikon, Olympus, Leica and Zeiss upright microscopes. For compatibility with inverted microscopes or for information regarding OEM and custom versions of the slide loader, please contact Prior Scientific directly at 1-800-877-2234.

VISIT PRIOR ON THE WEB AT www.prior.com
Specifications subject to change without notice.

PRIOR SCIENTIFIC LTD
CAMBRIDGE UK
T: +44(0) 1223 881 711
E: uksales@prior.com

PRIOR SCIENTIFIC INC.
ROCKLAND MA USA
T: +1 781-878-8442
E: info@prior.com

PRIOR SCIENTIFIC GMBH
JENA GERMANY
T: +49(0) 3641 675 650
E: vertrieb@prior.com

CERTIFICATE NO: FM 61600
STANDARD: BS EN ISO 9001:2000

PART NO. PL200 IK 10/08