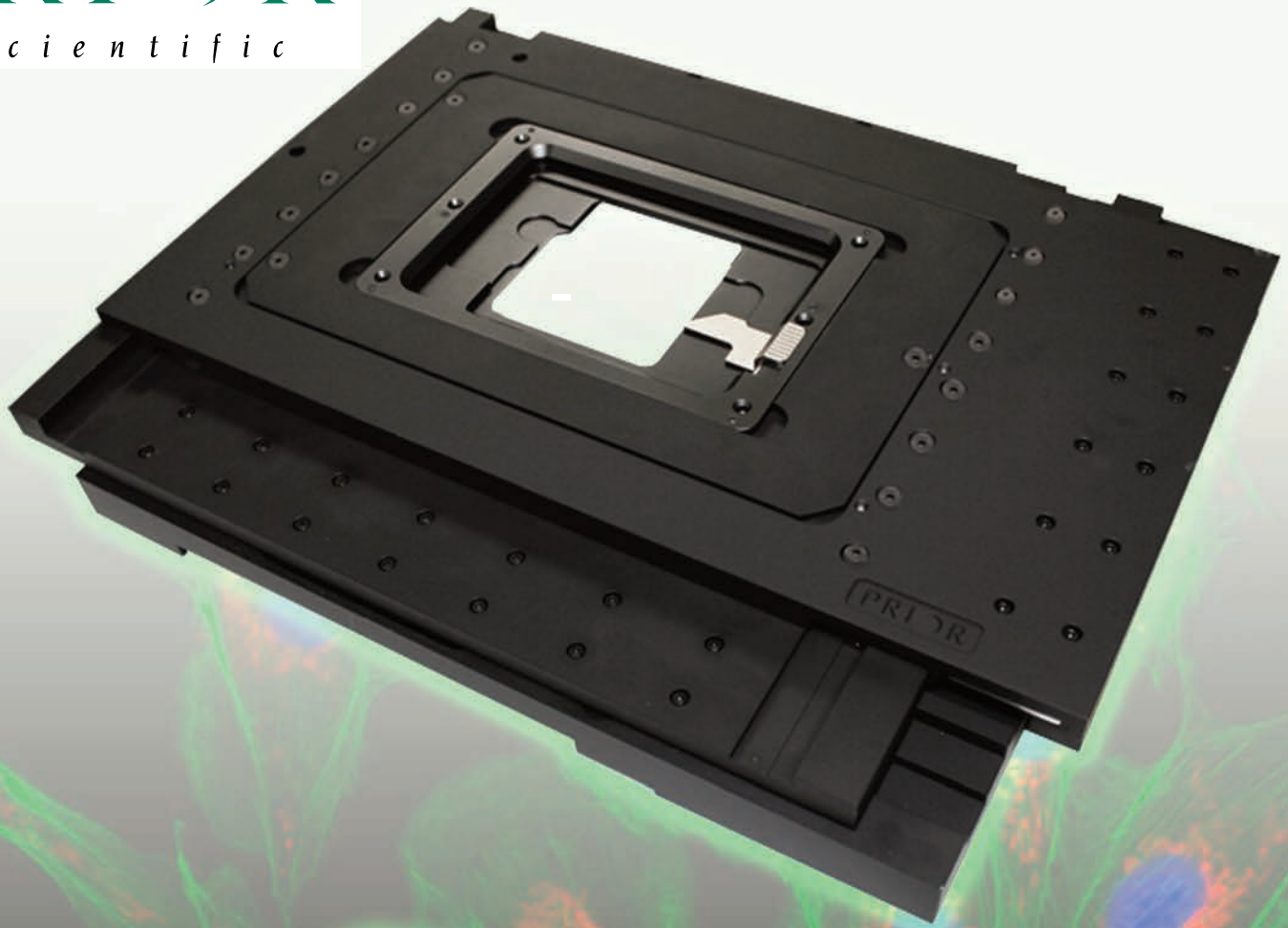
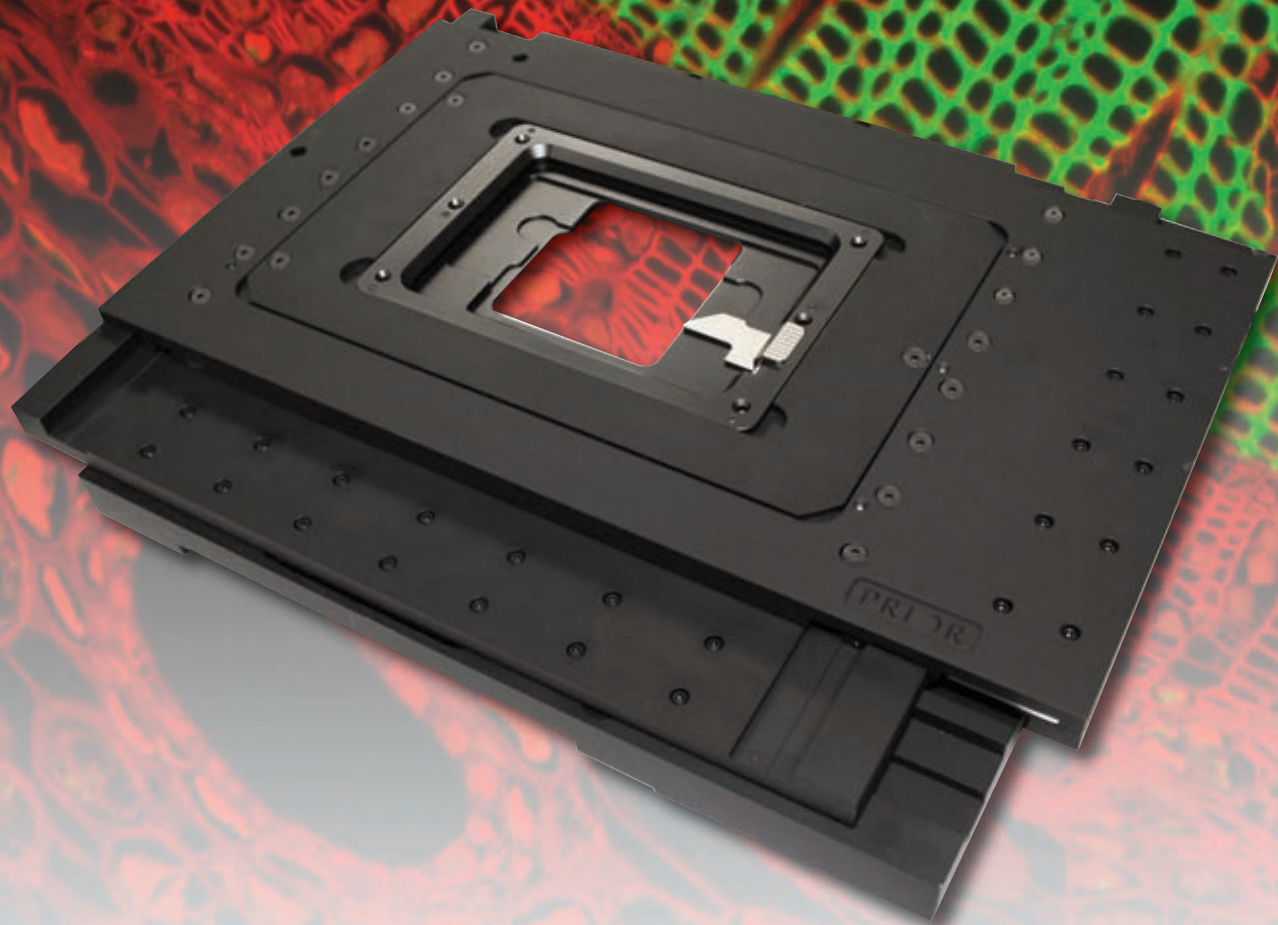


ProScan DC Linear Servo Stage Technology

PRIOR
Scientific





Stretching the Boundaries of Performance...

Ultra Quiet Operation

Can you hear that? Neither can we! Even at high speeds (up to 300 mm/sec) the linear DC servo motors are almost silent.

The Highest Precision

With an impressive 0.15 micron repeatability and 50 nanometer linear scales, the HLD117 is the best microscope stage on the market today. Optional 10 nanometer resolution linear scales provide flawless precision for the ultimate resolution.

Low Profile Design

The low profile flat top design allows ample room to access microscope adjustments.

Smooth Motion

The linear motors enable smooth, steady, controllable acceleration and travel provide the ultimate in stability for the sample. The movement is so smooth that images can be shot 'on the fly'. Programmable speeds down to 1um/second with the triggering ability of the ProScan controller enable picture perfect synchronization for imaging applications.

High Speed

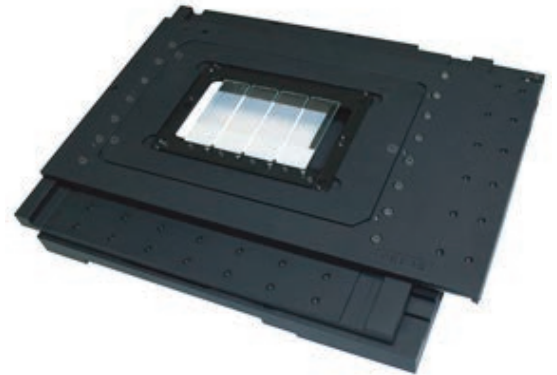
Prior has the speed you need! The HLD117 Linear Motor stages achieve the highest stage speeds and accelerations. A maximum programmable stage speed of 300mm/sec and very rapid accelerations bring your research to new levels.

Superior Versatility

Slide Scanning

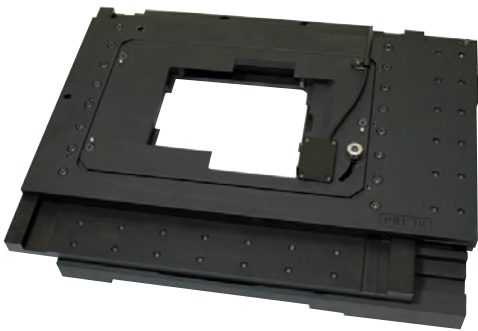
Built for performance with unmatched acceleration rates and speeds, the HLD117 is the best choice for either start/stop point to point imaging or for continuous motion and velocity controlled scanning applications. The ProScan controller with

TTL I/O and triggering functions provides constant speed movements with extremely low velocity ripple for picture perfect synchronization between automation and imaging software.



Multipoint Imaging

Whether your cells are fixed or in solution Prior linear drive stages make multiple position imaging a breeze. Image acquisition from multiple points scattered across a wide area is faster than previously thought possible. Scanning a 96 well plate in about 15 seconds? It's here. Want more data? Add Prior's Nanopositioning Piezo Z stage and collect three dimensional data at each position in milliseconds!



High Content Screening

Combine the fastest most precise stage ever made by Prior, solid state LED light sources, PLW20 Well Plate Loader, ProScan TTL triggering, your microscope and imaging software and you have the resolution, automation and speed, speed, speed needed for the acquisition of high content screening multi-parametric data.



Software Integration

Integration into existing imaging software could not be easier. The HLD117 linear motor stages from Prior Scientific respond to the same command set as previous Prior stages allowing them to work with existing applications with little or no required software modifications. For those starting from scratch, a comprehensive Software Development Kit is provided that makes integration with 3rd party software packages very straightforward. The most powerful and most flexible positioning systems for microscopy applications awaits your integration. We welcome the opportunity to work with you!

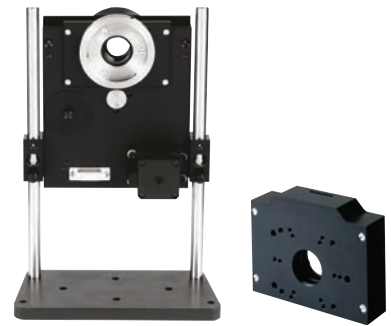


Contact Us for Custom and OEM Configurations!

Compatible Accessories

High Speed Filter Wheel and Shutters

The high speed filter wheel system delivers smooth operation and changes filter positions in as little as 55ms.

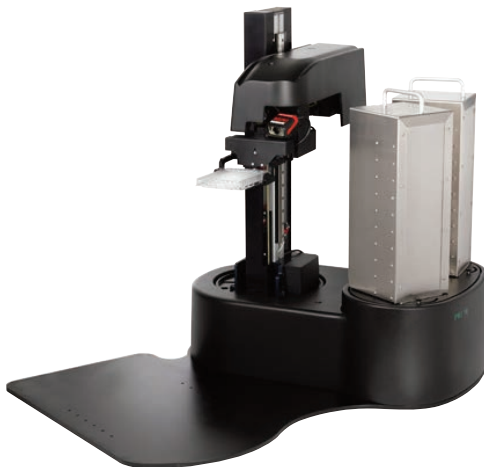


Focus Options

Stepper Z stages, Piezo Z stages and rotary stepper focus drives are available from Prior.

LED and Metal Halide Illumination Systems

Prior offers a range of LED illumination for brightfield and fluorescence microscopy applications along with a selection of metal halide lamp illumination systems.



Well Plate Loading Systems

Prior's PLW20 Well Plate Loading System is compatible with the ProScan system and with most major inverted microscopes. The PLW20 features a 20 well plate capacity in stainless steel racks for easy cleaning. Compatible with covered and uncovered well plates, the system fits all standard microtitre plates up to 19mm thick.

Branded, Special and OEM Systems

Prior Scientific controls the design and manufacturing process for all of our automated microscope products. From branded products to entirely unique solutions, Prior has the tools to provide for your needs.

From concept to finished product - Prior is the OEM solution you have been searching for!



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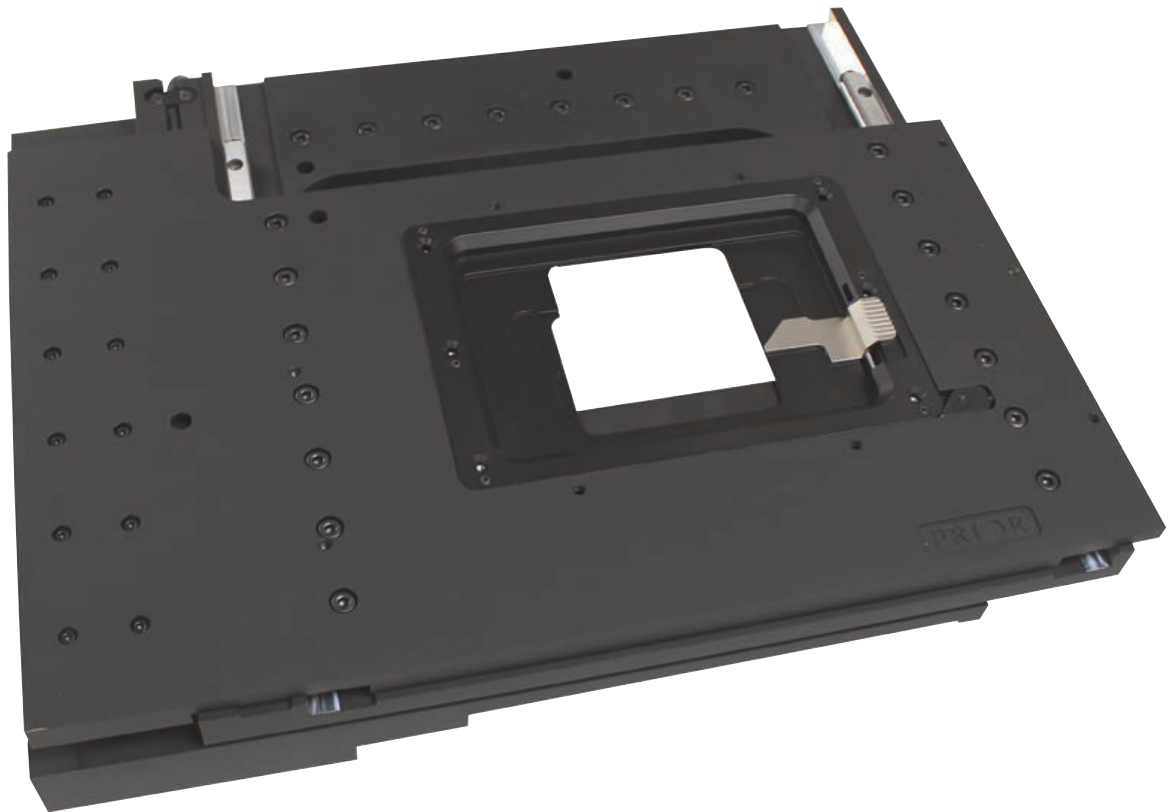
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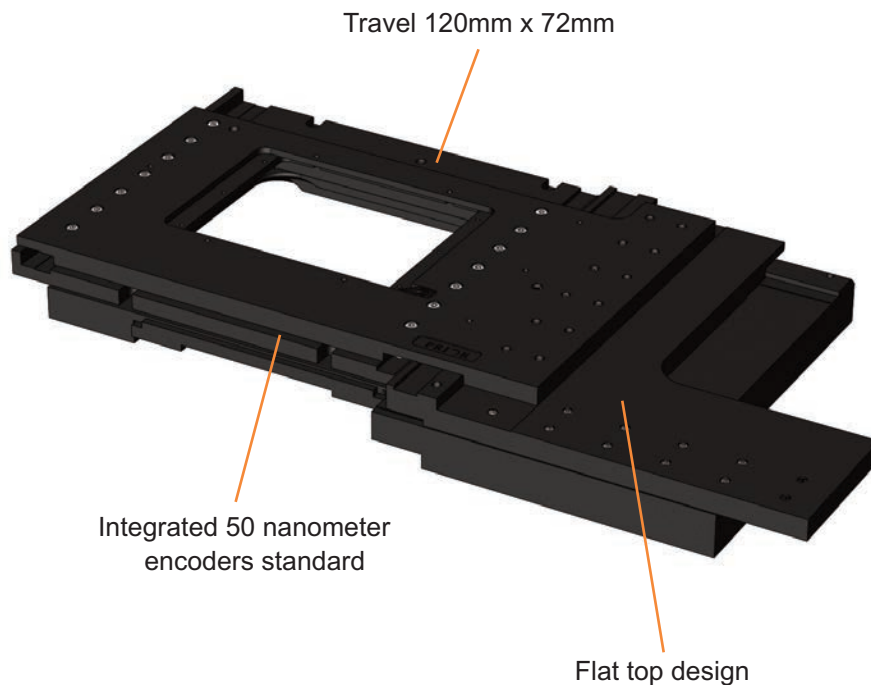
HLD117 Linear Motor Stage Series

High Precision Stages with Linear Motor Technology for
Leica DM, Nikon Ti and Olympus IX Microscopes



HLD117DM

High Precision Stage with Linear Motor Technology for Leica DMI Microscopes



Prior's newest stage technology, the HLD117DM stage with Linear Motor Technology brings a new level to precision in microscope automation.

Features of the HLD117DM include:

- Superior repeatability - 0.15µm*
- Faster scanning speeds up to 300mm/sec
- Low profile
- Ultra quiet operation
- Super smooth movements
- Flat top design
- Integrated 50 nanometer encoders standard
- Compatible with Prior NanoScan Piezo Z stages
- Fixed stage cable eliminates cable drag improving performance
- Integrates/compatible with most imaging software
- Range of standard sample holders

General Specifications

- Travel range: 120 mm x 72 mm
- XY repeatability: 0.15µm*
- Minimum step size (resolution): 0.05µm
- Metric accuracy (per mm of travel): 0.045µm**
- Minimum velocity: 1 micron/second
- Maximum velocity: 300 mm/second
- Squareness: 20 arc/second**

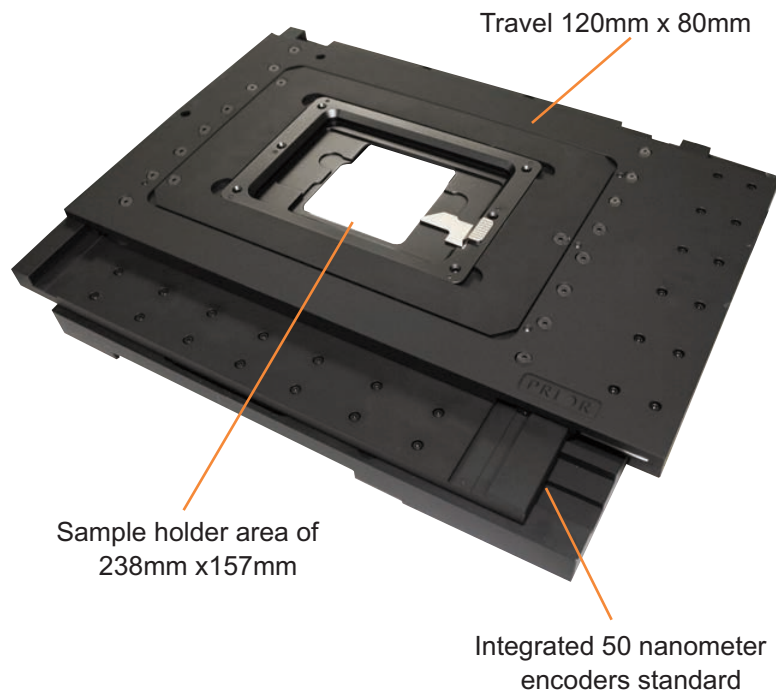
- Motors: high precision linear DC servo
- Linear slides: precision 3mm crossed roller way
- Limit switches: X and Y standard
- Stage profile: approximately 32.5 mm
- Weight: approximately 7 kg
- Maximum load capacity: 6 kg

*Mean value

**Based on performance with IST enabled and measured over full travel of the stage.

HLD117NN

High Precision Stage with Linear Motor Technology for Nikon Ti Microscopes



Prior's newest stage technology, the HLD117NN stage with Linear Motor Technology brings a new level to precision in microscope automation.

Features of the HLD117NN include:

- Superior repeatability - 0.15µm*
- Faster scanning speeds up to 300mm/sec
- Low profile
- Ultra quiet operation
- Super smooth movements
- Integrates seamlessly with Nikon Elements
- Adapter plate available for Prior's range of sample holders
- Flat top design
- Integrated 50 nanometer encoders standard
- Sample holder area of 238mm x 157mm (Nikon standard)
- Compatible with Prior NanoScan Piezo Z stages
- Fixed stage cable eliminates cable drag improving performance
- Compatible with Prior PLW20 Well Plate Loader

General Specifications

- Travel range: 120mm x 80mm
- XY repeatability: 0.15µm*
- Minimum step size (resolution): 0.05µm
- Metric accuracy (per mm of travel): 0.045µm**
- Minimum velocity: 1 micron/second
- Maximum velocity: 300 mm/second
- Squareness: 20 arc/second**

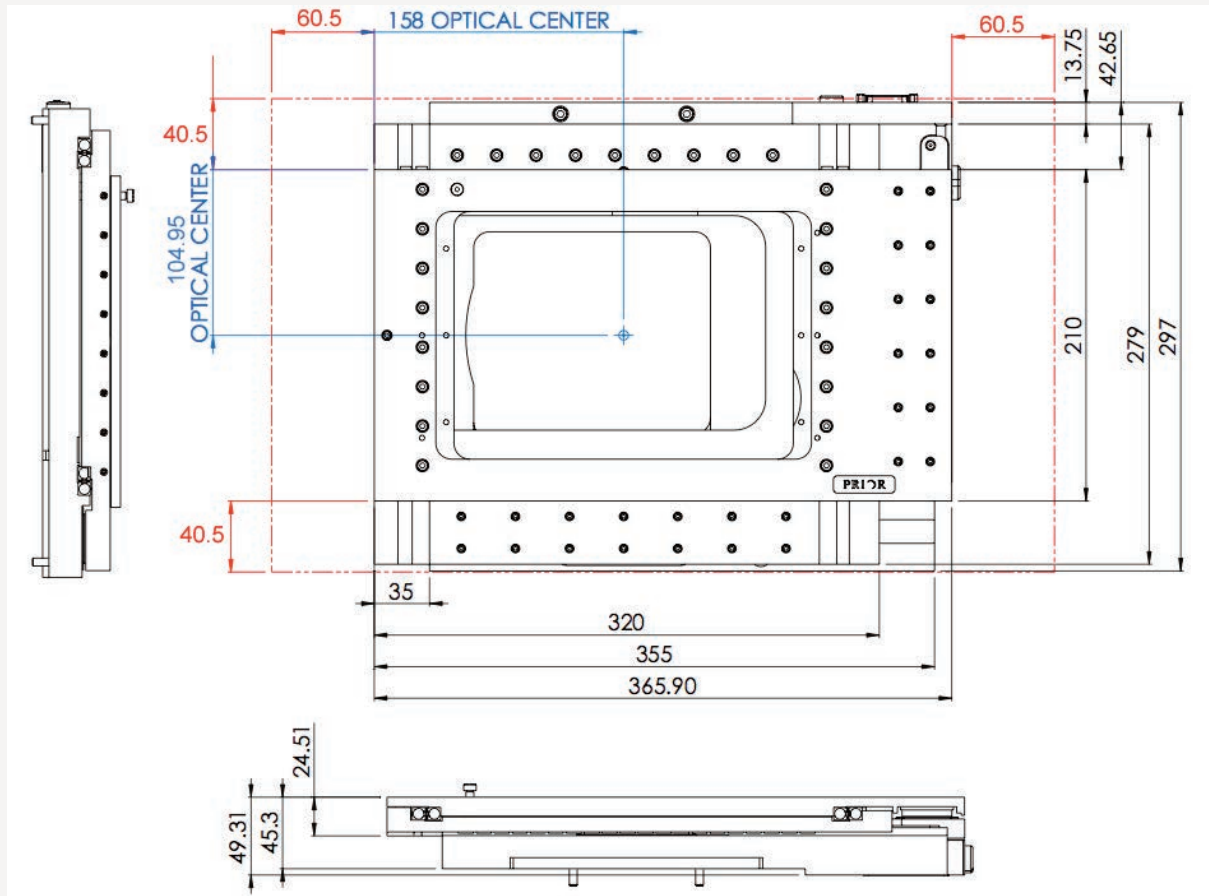
- Motors: high precision linear DC servo
- Linear slides: precision 3mm crossed roller way
- Limit switches: X and Y standard
- Stage profile: approximately 45.35mm
- Weight: approximately 7 kg
- Maximum load capacity: 6 kg

* Mean value

** Based on performance with IST enabled and measured over full travel of the stage.

HLD117NN Stage

High Precision Stage with Linear Motor Technology for Nikon Ti Microscopes

**HLD117NN Stage With Linear Stage Technology Ordering Information**

Part Number	Description
TILDXY	ProScan linear motor XY stage kit including ProScan III LD controller, HLD117NN linear stage, PS3JNJK joystick and H473XR universal slide/petri holder
HLD31XYZ	ProScan III LD linear motor controller
HLD117NN	Prior linear motor stage for Nikon Ti microscope
PS3JNJK	OEM ProScan III Joystick for Nikon
HLW223XR	Insert to adapt HLD117NN to HLW20N well plate loader
HLD324	Adapter for standard Prior sample holder

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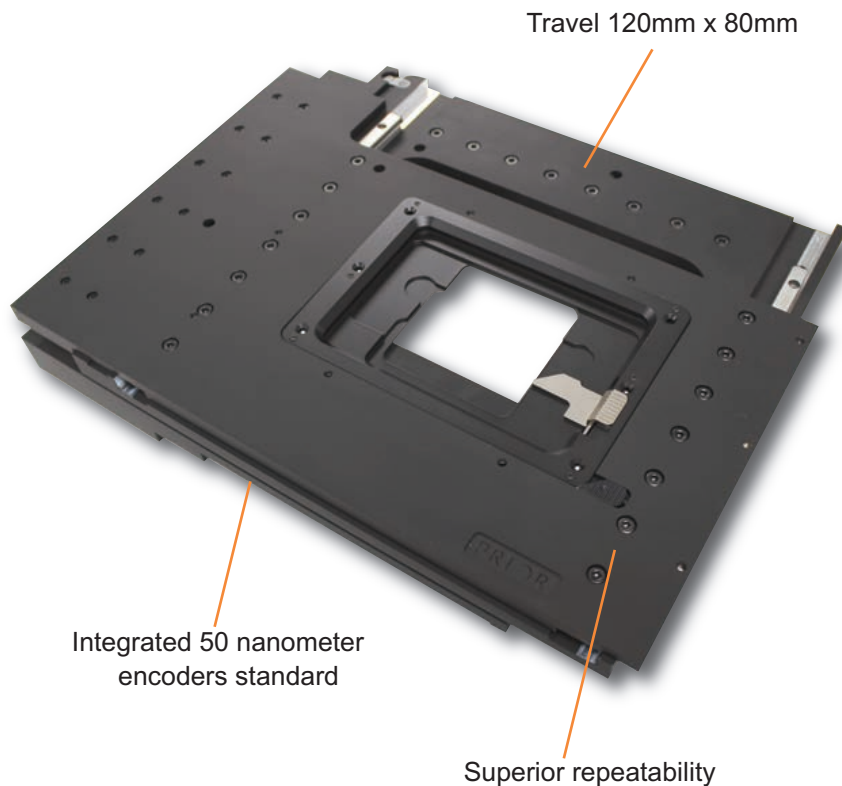
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HLD117IX

High Precision Stage with Linear Motor Technology for Olympus IX3 Microscopes



Prior's newest stage technology, the HLD117IX stage with Linear Motor Technology brings a new level to precision in microscope automation.

Features of the HLD117IX include:

- Superior repeatability - 0.15µm*
- Faster scanning speeds up to 300mm/sec
- Low profile
- Ultra quiet operation
- Super smooth movements
- Integrates with cellSens software
- Range of standard sample holders*
- Flat top design
- Integrated 50 nanometer encoders standard
- Compatible with Prior NanoScan Piezo Z stages
- Fixed stage cable eliminates cable drag improving performance

*For a complete list of Prior sample holders please see the Prior Scientific price list.

General Specifications

- Travel range: 120mm x 80mm
- XY repeatability: 0.15µm*
- Minimum step size (resolution): 0.05 µm
- Metric accuracy (per mm of travel): 0.045 µm**
- Minimum velocity: 1 micron/second
- Maximum velocity: 300 mm/second
- Squareness: 20 arc/second**

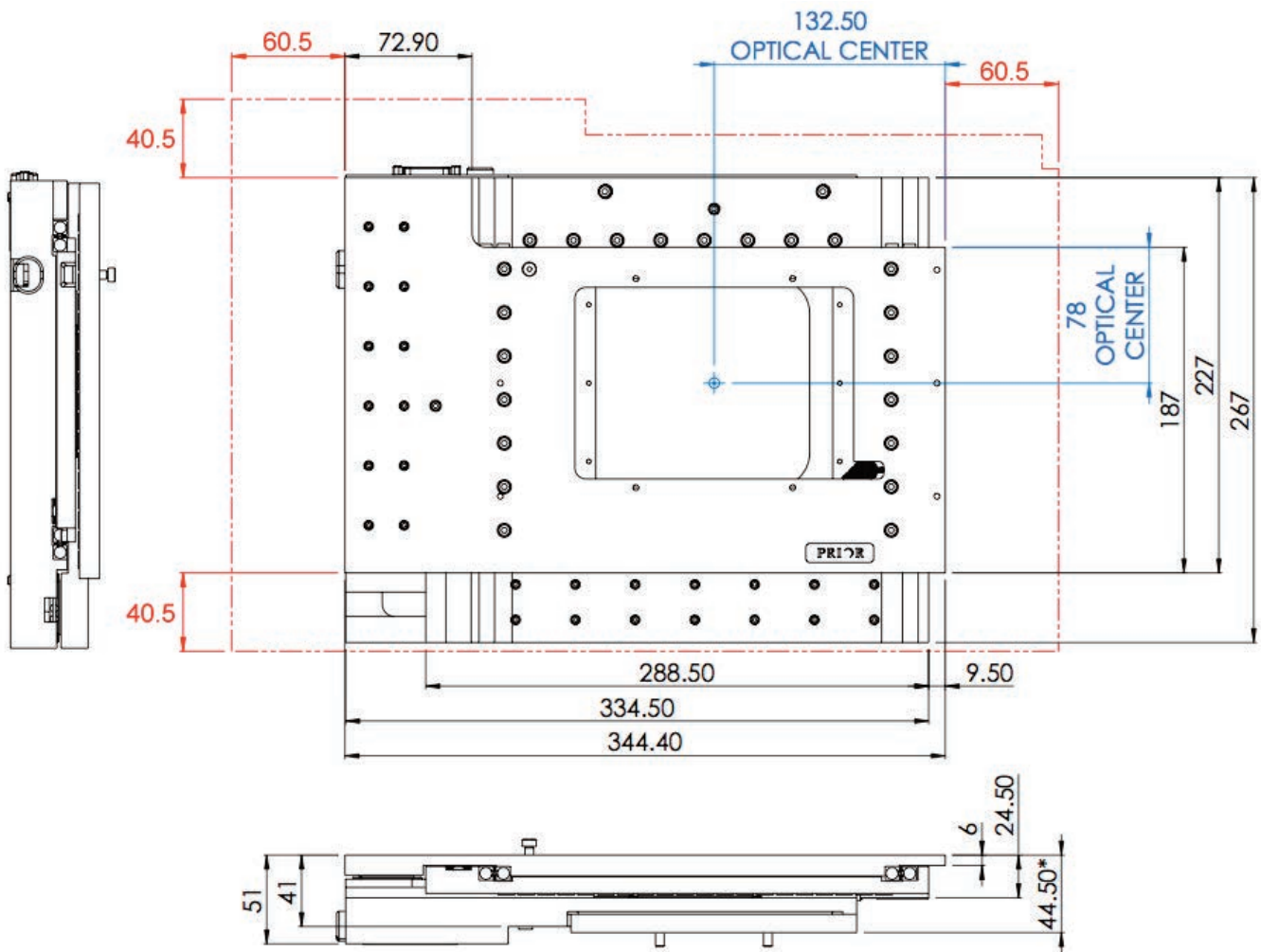
- Motors: high precision linear DC servo
- Linear slides: precision 3mm crossed roller way
- Limit switches: X and Y standard
- Stage profile: approximately 41mm
- Weight: approximately 7 kg
- Maximum load capacity: 6 kg

*Mean value

**Based on performance with IST enabled and measured over full travel of the stage.

HLD117IX Stage

High Precision Stage with Linear Motor Technology for Olympus IX3 Microscopes

**HLD117IX Stage With Linear Stage Technology Ordering Information**

Part Number	Description
IX3LDXY	ProScan linear motor XY stage kit including ProScan III LD controller, HLD117IX linear stage, PS3J100 joystick and H473XR universal specimen holder for slide/petri dishes
HLD31XYZ	ProScan III LD linear motor controller
HLD117IX	Prior linear motor stage for Olympus IX3 microscope
PS3J100	Interactive Control Center Joystick

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