

H117P1D4 / H117E1D4

Motorized high performance stages for Leica DMI-series

The H117P1D4 and H117E1D4 inverted stages are designed for use with Leica DMI-series microscopes.

The flat top design facilitates compatibility with many stage top incubation systems and positioning of peripheral equipment around samples for complex imaging operations. The H117E1D4 also uses 0.1 μm linear encoders for closed loop control and exceptional long-range repeatability.

Featuring Prior's patented Intelligent Scanning Technology (IST) to optimize stage accuracy, linearity and other performance characteristics, and being directly compatible with NanoScan SP Series piezo stages, the H117P1D4 and H117E1D4 are ideal for high end life science imaging.

Whilst the stages are typically configured with a 1 mm pitch ballscrew and 400 step motor for maximum resolution, alternative drive configurations focusing on speed may be available depending on your region.



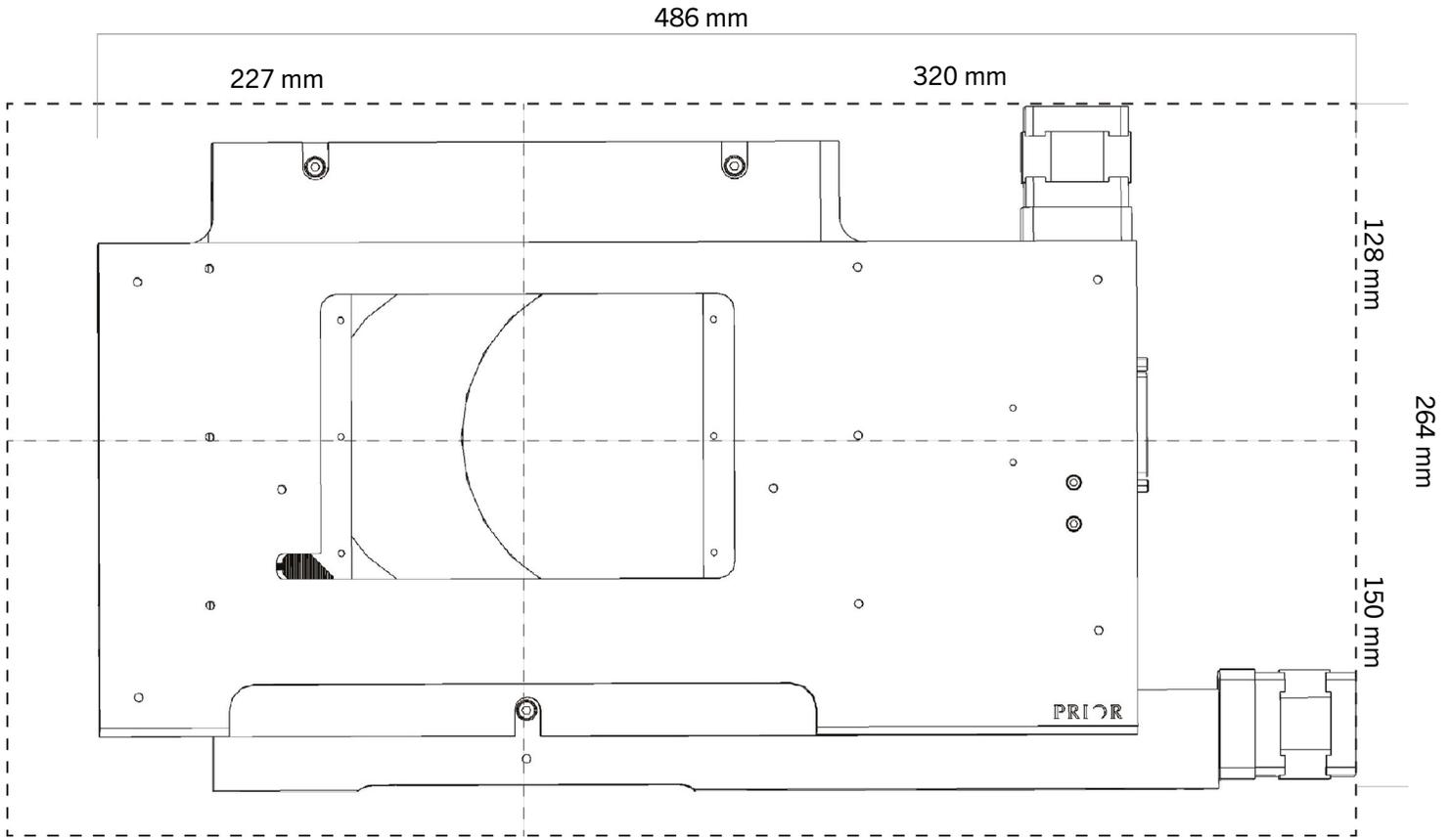
Key Features

- Directly compatible with Leica DMI8 and other DMI-series microscopes.
- Flat top design for easy sample loading.
- Compatible with NanoScan SP series piezo stages, stage top incubators and other peripheral equipment.
- Optimized for resolution and repeatability.
- Intelligent Scanning Technology™ (U.S. Patent 7,330,307).

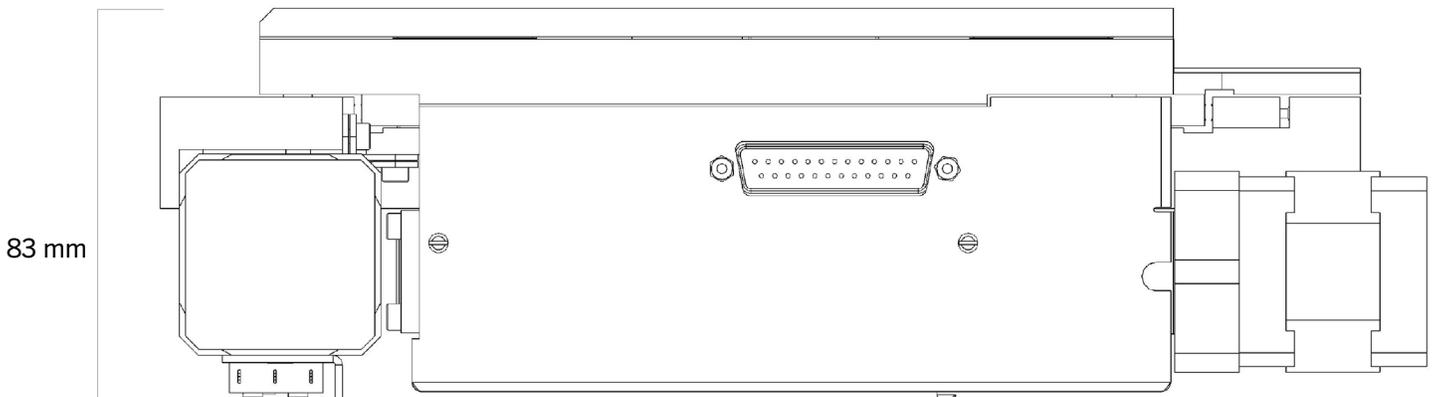
Applications

- Confocal and super-resolution microscopy
- Fluorescence microscopy
- High content screening
- Slide scanning

Dimensions*



*Outer dotted line shows the maximum footprint of the stage when at the limits of travel.



Specifications

	H117P1D4	H117E1D4
Travel range	114 mm x 75 mm	114 mm x 75 mm
Unidirectional repeatability ¹	<0.6 µm	<0.5 µm
Bidirectional repeatability ¹	<2.9 µm	<0.8 µm
Metric accuracy ¹	0.13 µm/mm	0.09 µm/mm
Full travel metric accuracy ¹	<14.0 µm	<10.0 µm
Resolution ²	0.01 µm	0.1 µm
Squareness ¹	<40 arcsec	<40 arcsec
Maximum velocity ³	15 mm/s	15 mm/s
Maximum load	10 kg	10 kg
Encoders	No	0.1 µm linear encoders
Motor type	400 step	400 step
Screw pitch	1 mm	1 mm
Weight	5 kg	5 kg

1. As per Prior Scientific's test methodology, typical value.

2. Defined as the minimum motor step resolution for non-encoded stages, defined as the encoder resolution for encoded stages.

3. Defined as 2.5x the default velocity, true maximum velocity is dependent on sample mass.

Ordering Information

Part Number	Description
H117P1D4	Flat top ProScan® stage for Leica DMI-series with travel range 114 x 75 mm, 1 mm pitch ball screw and 400 step motors.
H117E1D4	Flat top ProScan® stage for Leica DMI-series with travel range 114 x 75 mm, 1 mm pitch ball screw and 400 step motors. Encoded with 0.1 µm linear encoders.

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