

H117N1E4 / H117E1E4

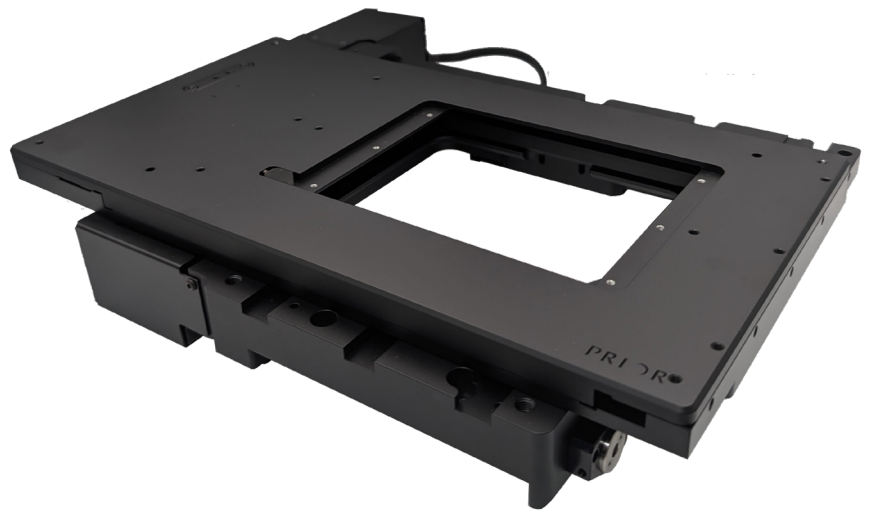
Motorized stage for Evident/Olympus IX85 microscopes

The H117N1E4 and H117E1E4 inverted stages are designed for use with the Evident/Olympus IX85 microscopes.

The flat top design facilitates compatibility with many stage top incubation systems and positioning of peripheral equipment around sample for complex imaging operations.

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 H117N1E4 and H117E1E4 are ideal for high end life science imaging.

Whilst the stages are typically configured with a 1mm pitch ballscrew and 400 step motor for maximum resolution, they are also available with a 2mm pitch ballscrew and 200 step motor for applications requiring higher throughput of samples.



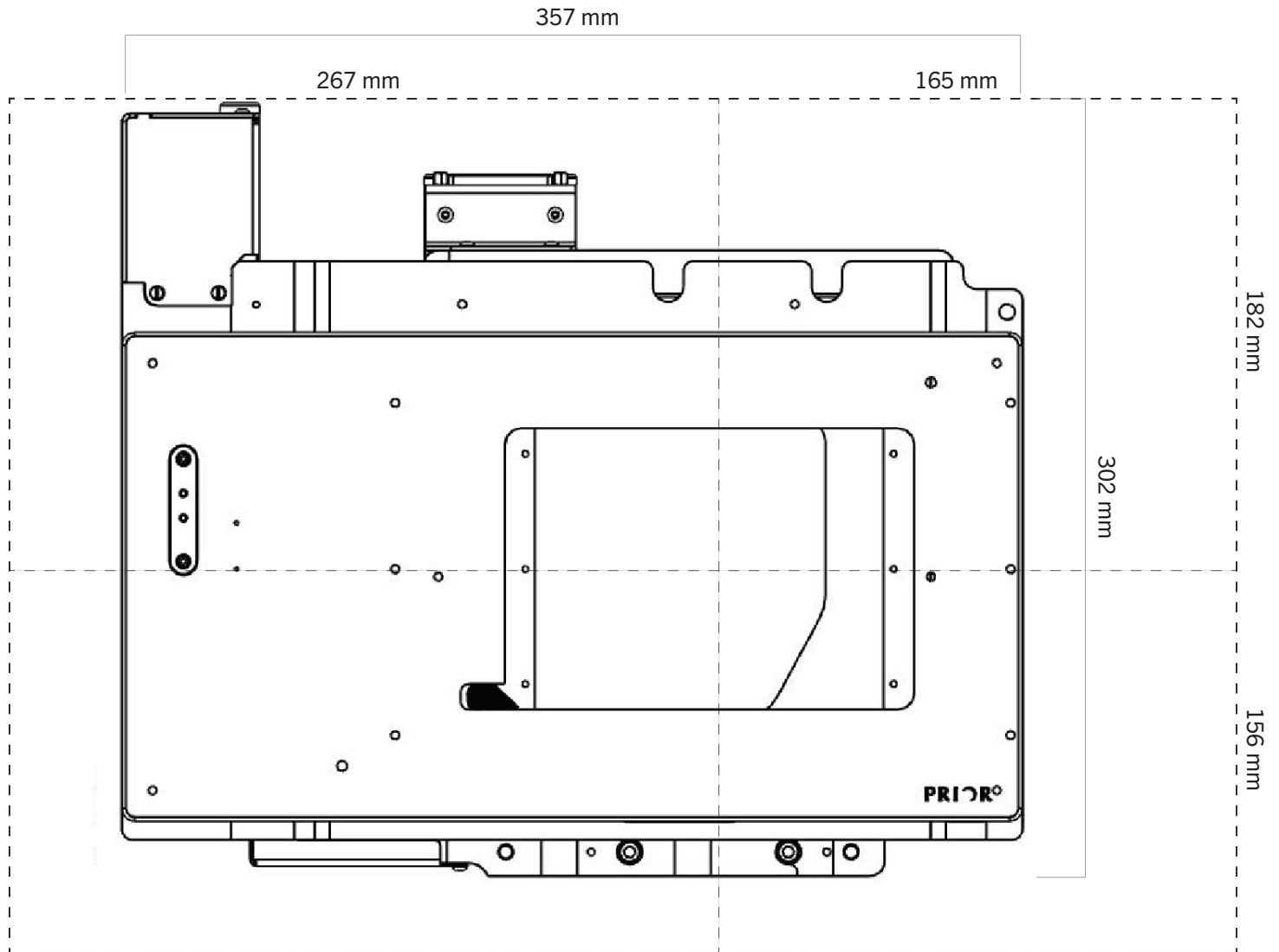
Key Features

- Directly compatible with Evident/Olympus IX85 microscopes and CellSens Dimension software.
- 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).

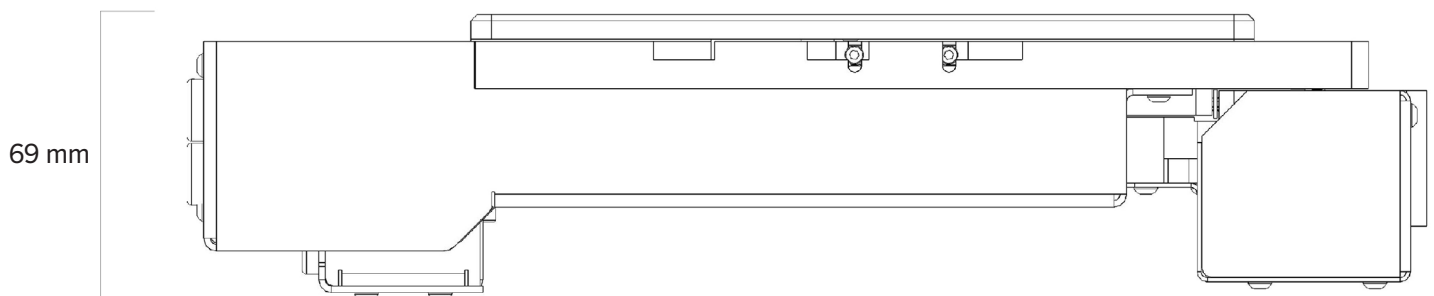
Applications

- 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

	H117N1E4	H117E1E4	H117N2E2	H117E2E2
Travel range	114 mm x 75 mm	114 mm x 75 mm	114 mm x 75 mm	114 mm x 75 mm
Unidirectional repeatability ¹	<0.8 µm	<0.5 µm	<0.8 µm	< 0.5 µm
Bidirectional repeatability ¹	<2.0 µm	<0.8 µm	< 3.6 µm	< 1.0 µm
Metric accuracy ¹	0.13 µm/mm	0.10 µm/mm	0.13 µm/mm	0.11 µm/mm
Full travel metric accuracy	<11.9 µm	<8.2 µm	<12.4 µm	< 8.9 µm
Resolution ²	0.01 µm	0.1 µm	0.04 µm	0.1 µm
Squareness ¹	<20 arcsec	<15 arcsec	<20 arcsec	< 15 arcsec
Maximum velocity ³	15 mm/s	15 mm/s	60 mm/s	60 mm/s
Maximum load	10 kg	10 kg	10 kg	10 kg
Encoders	No	0.1 µm linear encoders	No	0.1 µm linear encoders
Motor type	400 step	400 step	200 step	200 step
Screw pitch	1 mm	1 mm	2 mm	2 mm
Weight	5 kg	5 kg	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
H117N1E4	Flat top ProScan® stage for Olympus IX85 inverted microscopes with travel range 114 x 75 mm, 1 mm pitch ball screw and 400 step motors.
H117E1E4	Flat top ProScan® stage for Olympus IX85 inverted microscopes with travel range 114 x 75 mm, 1 mm pitch ball screw and 400 step motors. Encoded with 0.1 µm linear encoders.
H117N2E2	Flat top ProScan® stage for Olympus IX85 inverted microscopes with travel range 114 x 75 mm, 2 mm pitch ball screw and 200 step motors.
H117E2E2	Flat top ProScan® stage for Olympus IX85 inverted microscopes with travel range 114 x 75 mm, 2 mm pitch ball screw and 200 step motors. Encoded with 0.1 µm linear encoders.

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