

H138A / HE38

Motorized microscope stage with 8 slide capacity

The H138A and HE38 motorized XY stages are designed for integration into custom microscopes or OEM designs and adapts to different hardware configurations.

The stages use a 2 mm pitch ballscrew and 200-step motor drive to cover its large travel area quickly, and features Prior's patented Intelligent Scanning Technology (IST) to optimize stage accuracy and linearity.

The H138A and HE38 fit up to eight 75 mm x 25 mm microscope slides and offer extended lateral travel for imaging large samples, such as PCBs, or arrays of multiple samples.



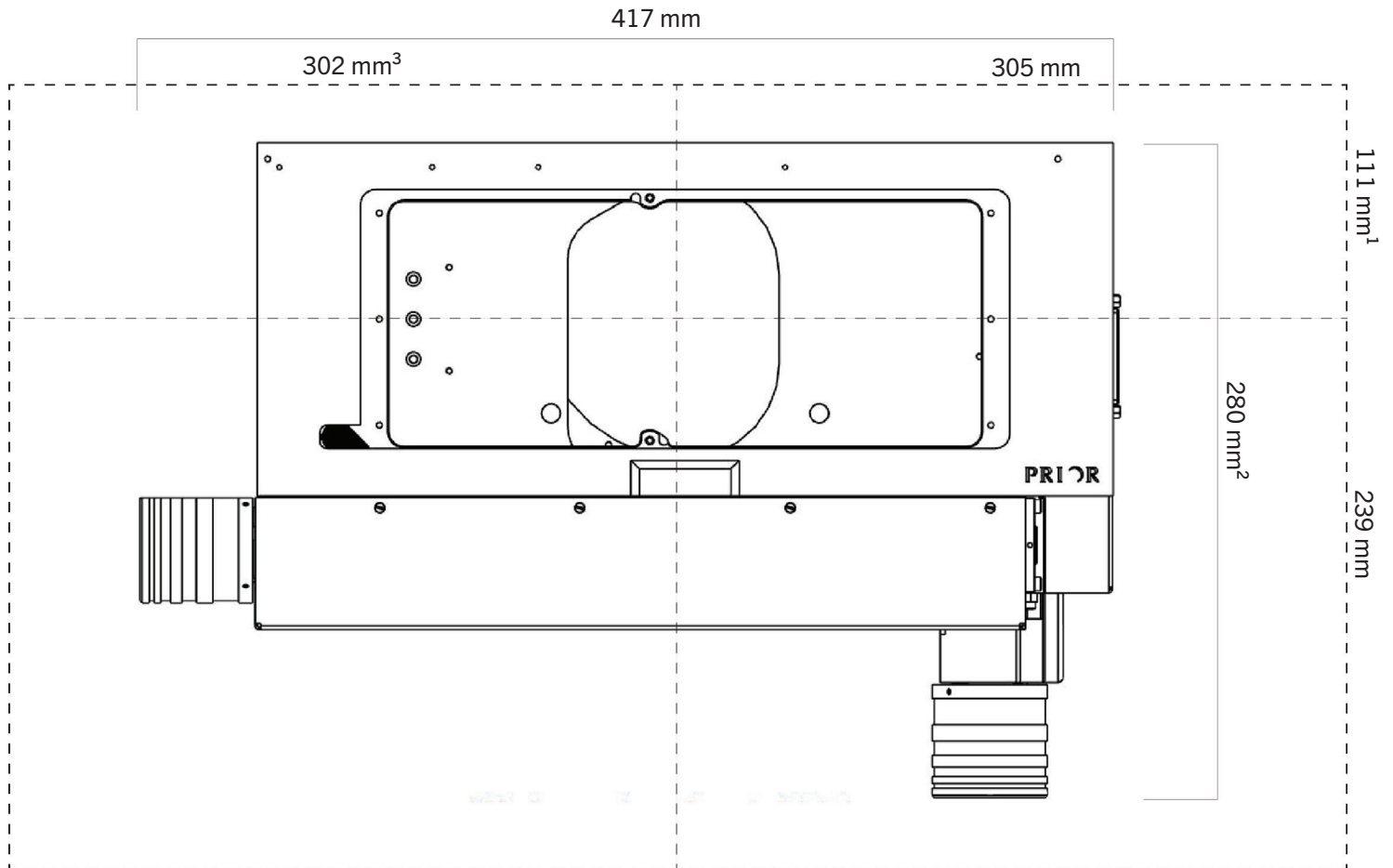
Key Features

- Compatible with most brands of upright microscopes and fully customizable for use in OEM projects
- Optimized drive configuration for slide scanning, offering fast and precise movement.
- Extended lateral travel for imaging larger samples or multiple slides.
- Intelligent Scanning Technology™ (U.S. Patent 7,330,307).

Applications

- Slide scanning
- Confocal and super-resolution microscopy
- Fluorescence microscopy
- Metrology

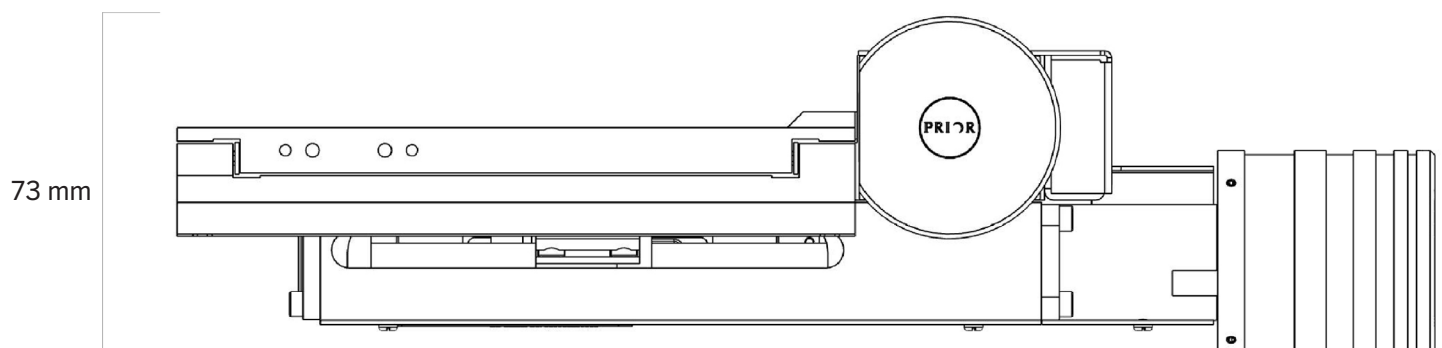
Dimensions*



Notes

1. Increases to 121 mm with HE38
2. Increases to 290 mm with HE38
3. Increases to 348 mm with HE38

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



Specifications

	H138A	HE38
Travel range	240 mm x 71 mm	240 mm x 71 mm
Unidirectional repeatability ¹	< 1 µm	< 0.9 µm
Bidirectional repeatability ¹	< 3.9 µm	< 1.3 µm
Metric accuracy ¹	0.15 µm/mm	0.10 µm/mm
Full travel metric accuracy ^{1,4}	< 34.0 µm	< 25.0 µm
Resolution ²	0.04 µm	0.1 µm
Squareness ¹	< 50 arcsec	< 50 arcsec
Maximum velocity ³	60 mm/s	60 mm/s
Maximum load	10 kg	10 kg
Encoders	No	0.1 µm resolution
Motor type	200 step	200 step
Screw pitch	2 mm	2 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.

4. Specification for X (long) axis.

Ordering Information

Part Number	Description
H138A	Extended X range ProScan® stage for upright microscopes capable of holding 8 standard microscope slides, with travel range of 240 x 71 mm, 2 mm pitch ball screw and 200 step motors.
HE38	Extended X range ProScan® stage for upright microscopes capable of holding 8 standard microscope slides, with travel range of 240 x 71 mm, 2 mm pitch ball screw and 200 step motors.

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