

H101A / HE01

Motorized microscope stages for upright microscopes

The ProScan H101A and HE01 are motorized XY stages for upright microscopes and are fully customizable. Their compact design makes them ideal for integration into OEM devices or customized microscopes.

Both stages have a 2 mm ballscrew and 200-step motor for a balance of velocity and resolution, offering sub-micron repeatability while also providing speeds of up to 60 mm/s. The HE01 also uses 0.1 μm linear encoders to provide enhanced long-range repeatability.

Prior's patented Intelligent Scanning Technology (IST) optimizes the stages' accuracy and linearity.

The H101A and HE01 accommodate a variety of specimen types including glass slides, multiwell plates, semiconductor wafers, and metallurgical samples.



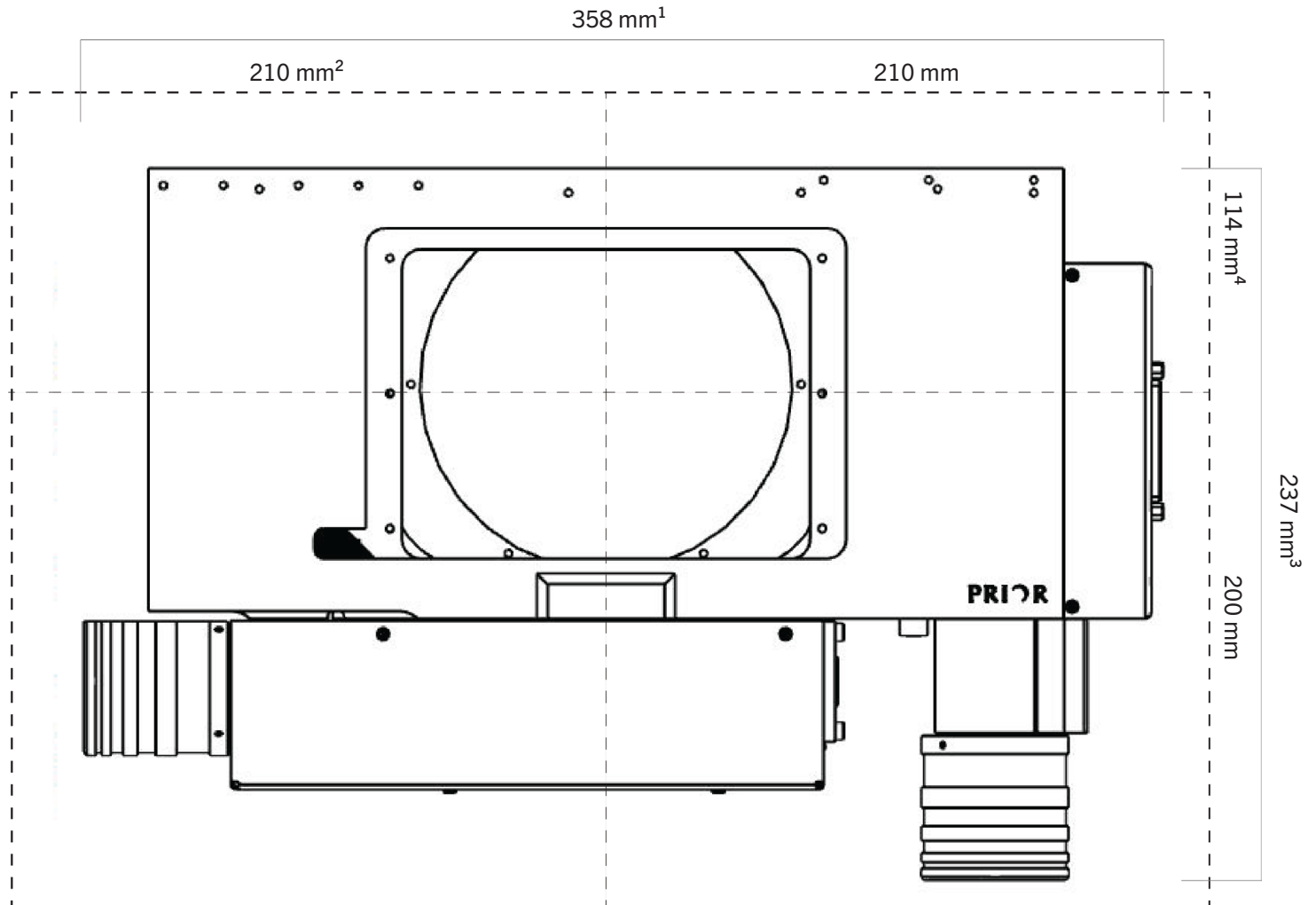
Key Features

- Compatible with most brands of upright microscopes and fully customizable for use in OEM projects.
- Quiet and reliable.
- Wide range of sample holders.
- Intelligent Scanning Technology™ (US Patent 7,330,307).

Applications

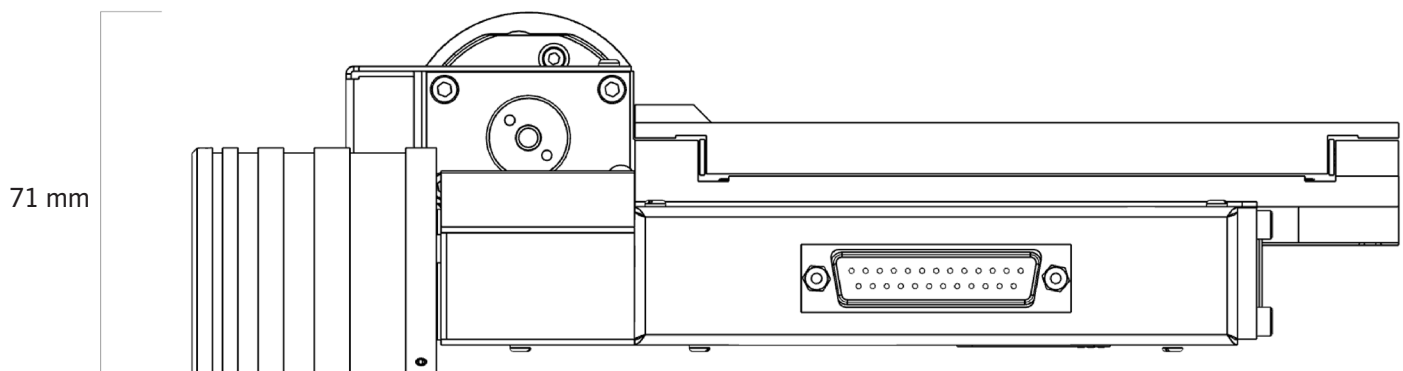
- Confocal and super-resolution microscopy
- Metrology
- Slide scanning

Dimensions*



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

1. Increases to 397mm with HE01
2. Increases to 268 mm with HE01
3. Increases to 258mm with HE01
4. Increases to 122mm with HE01



Specifications

	H101A	HE01
Travel range	114 mm x 75 mm	114 mm x 75 mm
Unidirectional repeatability ¹	<0.6 µm	<0.6 µm
Bidirectional repeatability ¹	<2.9 µm	<1.0 µm
Metric accuracy ¹	0.12 µm/mm	0.11 µm/mm
Full travel metric accuracy ¹	<12.0 µm	<9.0 µm
Resolution ²	0.04 µm	0.1 µm
Squareness ¹	<30 arcsec	<30 arcsec
Maximum velocity ³	60 mm/s	60 mm/s
Maximum load	10 kg	10 kg
Encoders	No	0.1 µm linear encoders
Motor type	200 step	200 step
Screw pitch	2 mm	2 mm
Weight	3.5 kg	3.5 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
H101A	ProScan® stage for upright microscopes, with travel range of 114 x 75 mm, 2 mm pitch ball screw and 200 step motors.
HE01	ProScan® stage for upright microscopes, with travel range of 114 x 75 mm, 2 mm pitch ball screw and 200 step motors. Provided with 0.1 µm linear encoders.

*These stages can be adapted to numerous commercial microscopes. See our website, or contact Prior, for a full list of options.

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