PRIOR®
Scientific

H101N2F / H101E2F

Motorized flat top high speed stage for upright microscopy

The ProScan H101N2F and H101E2F are motorized XY stages for upright microscopes and are fully customizable for integration into OEM devices.

The stages have a 2 mm ballscrew and 200-step motor for a balance of speed and resolution. The encoded H101E2F also uses 0.1 µm linear encoders to provide exceptional long-range repeatability. Prior's patented Intelligent Scanning Technology (IST) optimizes stage accuracy and linearity.

The H101N2F and H101E2F accommodate a variety of specimen types including glass slides, multiwell plates, semiconductor wafers, and metallurgical samples.

A slim profile with a completely flat top plate allows easy access to the sample for loading and compatibility with a wide range of optics.

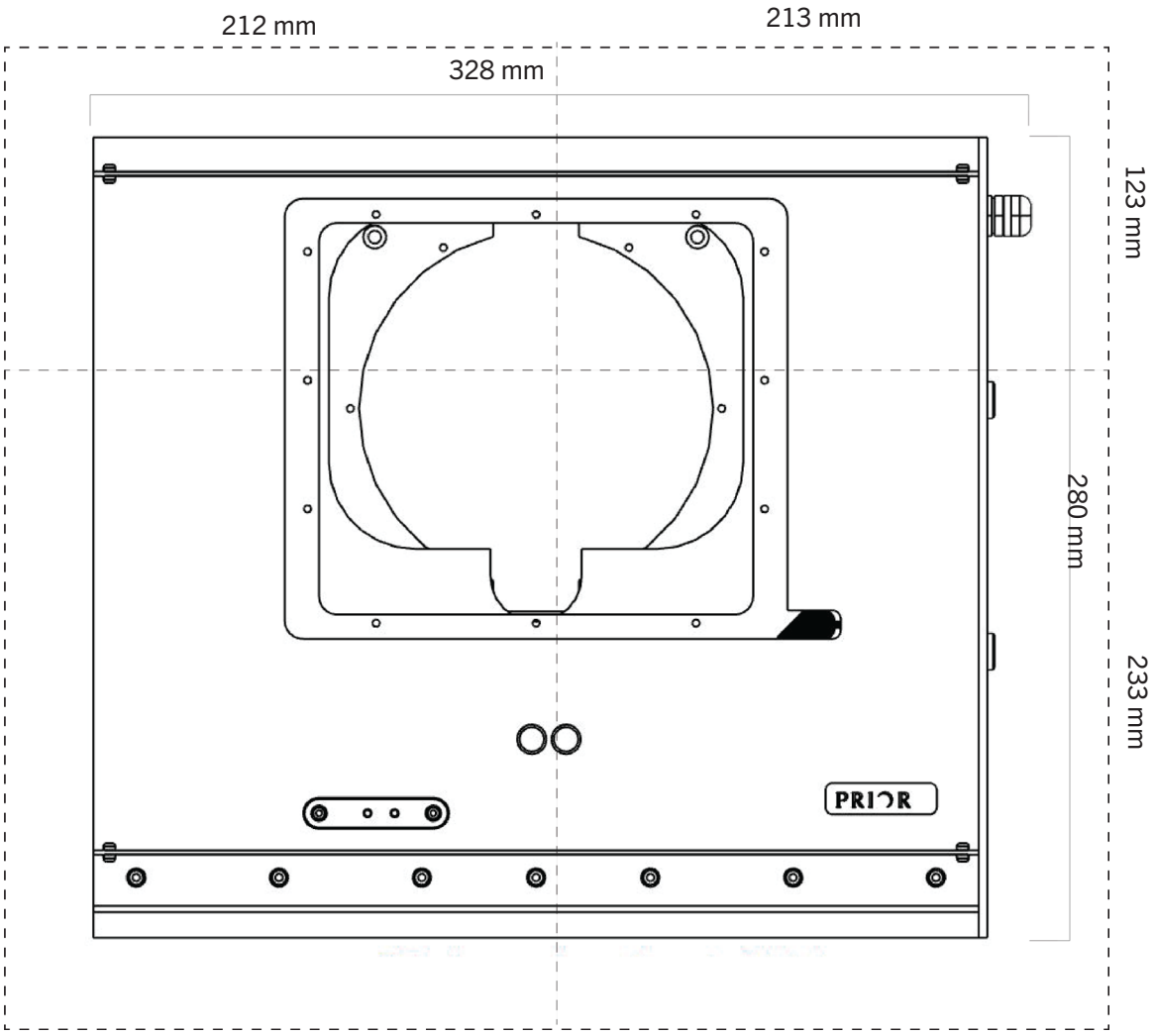
Key Features

- Easy to integrate into customized imaging solutions.
- Excellent combination of speed and accuracy.
- Aesthetic and user-friendly flat top design.
- Intelligent Scanning Technology™ (US Patent 7,330,307).

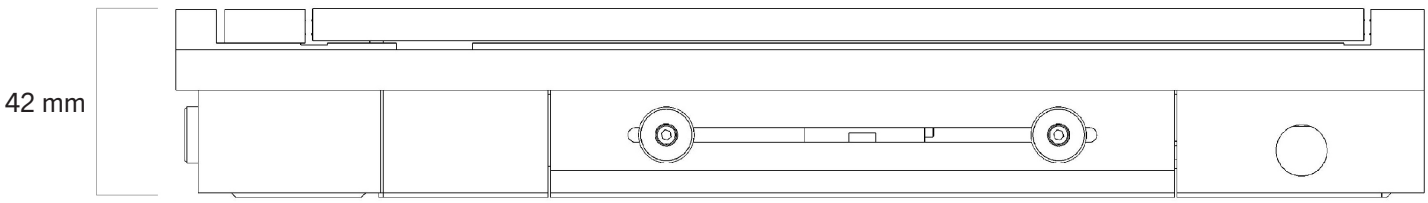
Applications

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

Dimensions*



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



Specifications

	H101N2F	H101E2F
Travel range	114 mm x 75 mm	114 mm x 75 mm
Unidirectional repeatability[1]	<0.8 µm	< 0.7 µm
Bidirectional repeatability[1]	<3.6 µm	<0.9 µm
Metric accuracy[1]	0.12 µm/mm	0.08 µm/mm
Full travel metric accuracy[1]	<12.0 µm	<6.5 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	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
H101N2F	ProScan® stage for upright microscopes, with travel range of 114 x 75 mm, 2 mm pitch ball screw and 200 step motors.
H101E2F	ProScan® stage for upright microscopes, with travel range of 114x75 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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