

H101F ProScan® Flat Top Stage

Motorised Stepper Stage For Upright Microscopes



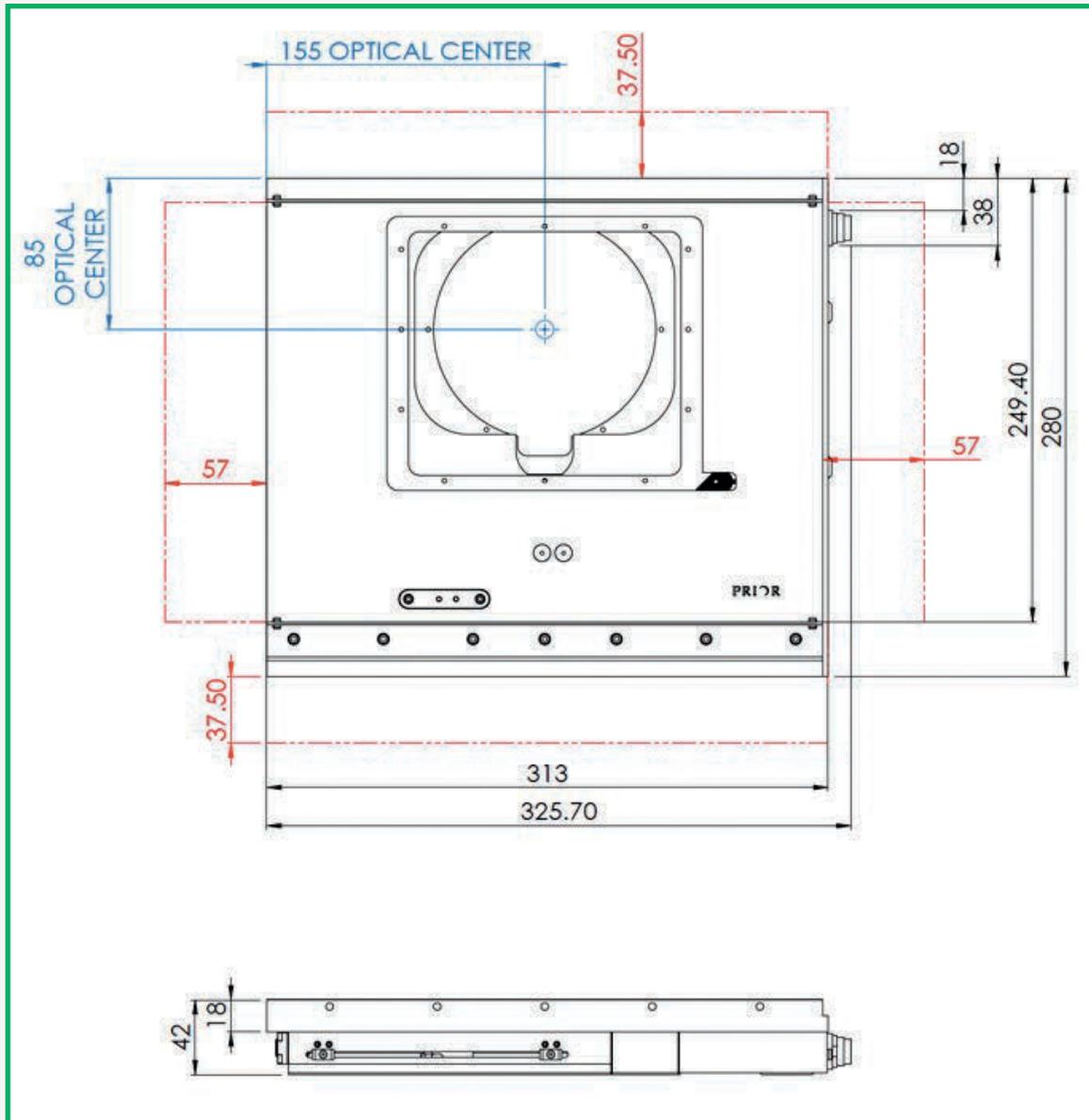
The H101F stage is designed for upright microscopes and offers a powerful combination of precision and convenience, with a travel range of 114 mm x 75 mm. With a super thin, flat top design, the H101F stage provides unlimited obstruction free space; giving an unimpeded 360° degrees in which an objective or nose piece may be rotated. By combining the H101F stage with ultra-low sample holders, the stage can easily be integrated into a system with high-NA objectives or condensers. The user can thus benefit from a precise motorised stage, combined with extremely high magnification, without the risk of damage to either the microscope, the inserts, or the sample itself, whilst also gaining easy access to condenser and other sub-stage microscope adjustments.

The H101F's already impressive versatility is further increased by its larger sample holder area (176 mm x 154 mm) allowing a wide variety of applications, such as those involving large tissue sections and other custom sample holders, to be undertaken. Externally adjustable limit switches allow for quick and simple stage travel adjustments, whilst a smaller stage cable and connector simplifies cable routing.

By integrating this stage into the ProScan system, the end user gains a powerful, precise and versatile system which can be integrated with a huge range of microscopes, image analysis software and other microscopy accessories.

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Outline Drawing



BX31 Microscopes

The BX31 microscope can be fitted with an adapted version of the H101F stage. With the addition of pillar mounts, the stage can be simply yet securely attached to the microscope. These are identified by their 'B3' suffix.



Controller Options

The ProScan III controller and stage include as standard IST which significantly improves the metric accuracy of the ProScan stage. The Prior Interactive Control Centre (PS3J100) provides positional feedback as well as the ability to measure distances. The stage can be controlled either via the joystick or via fine individual X and Y control knobs.



Ordering Information

Part Number	Description
V31XYZE	Encoded X Y and Z axis control
V31XYZEF	Encoded X Y and Z axis control with filter wheels and shutter control

Specifications

Performance	H101P2F/ H101P2B3	H101P1F/ H101P1B3	H101E2F/ H101E2B3	H101E1F H101E1B3
Mean Uni-directional	± 0.2 µm	± 0.2 µm	± 0.2 µm	± 0.2 µm
Repeatability				
Minimum step size	0.04 µm	0.02 µm	0.04 µm	0.02 µm
Recommended Speed	40 mm/s	20 mm/s	40 mm/s	20 mm/s
(Max Speed)	(100 mm/s)	(50 mm/s)	(100 mm/s)	(50 mm/s)
Metric Accuracy	0.2 µm/mm	0.2 µm/mm	0.2 µm/mm	0.2 µm/mm
Maximum load	10 kg	10 kg	10 kg	10 kg
Weight	4 kg	4 kg	4 kg	4 kg
Ball Screw pitch	2 mm	1 mm	2 mm	1 mm
Motor Type*	200 SPR	200 SPR	200 SPR	200 SPR
Encoders	No	No	0.1 µm resolution	0.1 µm resolution

These statistics are based on the Prior method of testing and are based on performance with IST and backlash correction enabled and measured over the full travel range whilst being controlled with a ProScan III controller. All repeatability is uni-directional.

SPR = full Steps Per Revolution of motor.