

H105 Stage

6"x6" Travel, Programmable, Motorized Stepper Stage for Upright Microscopes

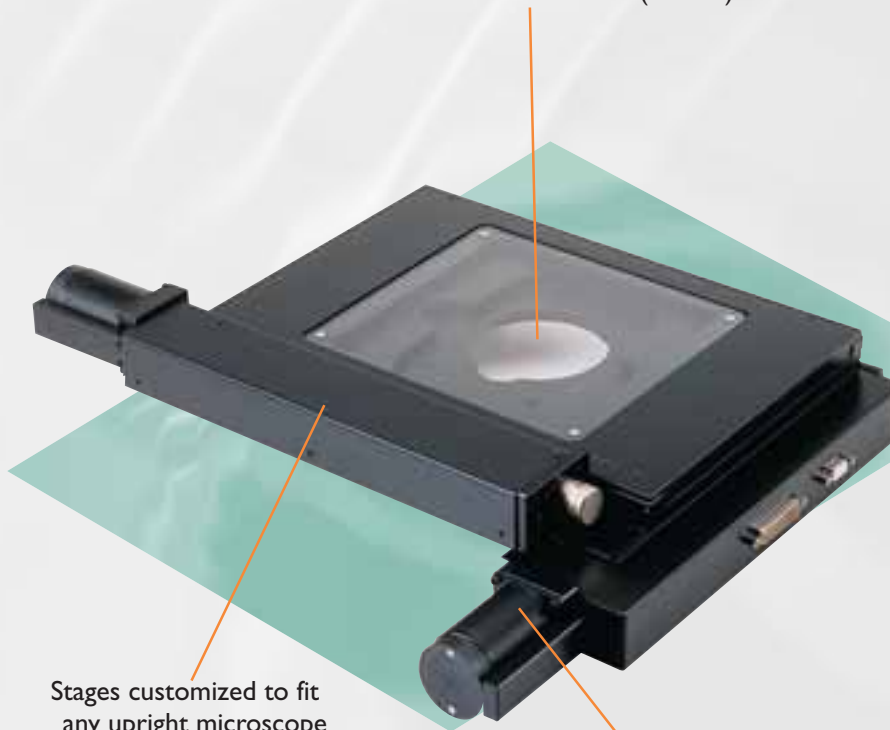
Features

Now add the highest quality, precision motorized stepper stage to your upright microscope: the Prior Model H105. The H105 is one of a full range of motorized stepper stages from Prior Scientific, adaptable to virtually any microscope or optical system. The H105 is especially well-suited for applications that typically involve large specimens. For example, the H105 is perfect for performing scanning of a wide range of semiconductor wafers, photo masks, and printed circuit boards. The H105 can easily accommodate 6" wafers. A variety of sample holders are available and stage inserts can be customized for any application. The H105 features:

- Travel 153 mm x 153 mm (6" x 6")
- Repeatability to ± 0.3 micron with optional linear scales
- Minimum step size (resolution) of the stage is 0.04 microns
- Stages customized to fit any upright microscope or optical system
- Closed loop capability with optional rotary or linear encoders

Prior stages have a well-deserved reputation for quality and repeatability. They are manufactured using the highest quality components: crossed roller ways, zero backlash recirculating ball screws, X and Y limit switches, two high precision stepper motors even a tough scratch resistant coating. They are available with standard and custom sample holders to suit the user's application and requirements. Stages can be driven by the Prior series of motor controllers or compatible systems in existing OEM configurations. The controller can be accessed via RS-232 serial port or with an optional joystick or keyboard. For the H105 and all its products, Prior provides full support and service both direct and indirect – through a professional, knowledgeable and extensive dealer network.

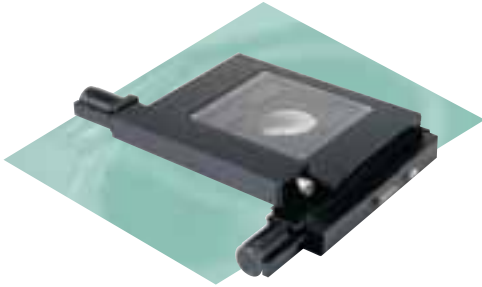
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Stages customized to fit any upright microscope or optical system

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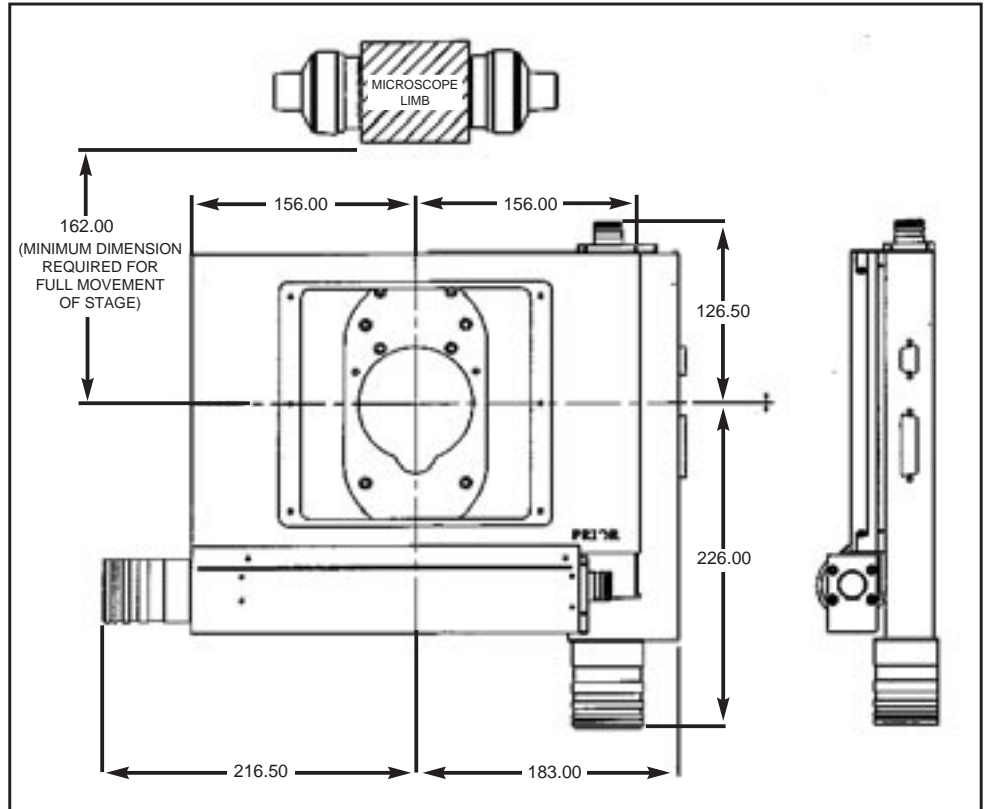
**6"x6" Travel, Programmable,
Motorized Stepper Stage for
Upright Microscopes**

Standard Sample Holders

500-H226	Slide Holder, Holds One 1" x 3" Slide
500-H227	Glass Plate
500-H231	Solid Aluminum Plate
500-H143	Chuck, Wafer, Spring Loaded for 75 mm Wafers
500-H146	Chuck, Wafer, Spring Loaded for 150 mm Wafers
500-HWC155	Chuck, Wafer, Rotatable with Steps for 100 and 150 mm Wafers
500-HWC15V	Chuck, Wafer, Rotatable, with Vacuum for 150 mm Wafers
500-HWC105	Chuck, Wafer Pod, Vacuum
500-H246	Motorized Rotating Holder, 71 mm Diameter Table

Ordering Information

500-H105/2	Stage with 2 mm pitch screws
500-H105/5	Stage with 5 mm pitch screws
500-H105JENK	Add linear encoders
500-H105/S	Add rotary encoders
500-HK05	Add manual override knobs



Dimensions in millimeters.

General Specifications

Travel Range

153 mm x 153 mm (6" x 6")

Repeatability*

±2 µm (micrometer), open loop
± 0.3 µm with linear scales

Minimum Step Size (Resolution)

0.04 µm

Load Capacity

20 kg (44 lbs)

Stepper Motor

4 phase, 1 amp per phase,
micro stepping

Linear Slides

Crossed 3 mm roller bearings

Drive Screws

Zero backlash, recirculating ball screws;
2 mm pitch or 5 mm pitch

Limit Switches

X and Y standard

Stage Profile

Approximately 30 mm (1.2") with
glass plate installed

Weight

5.0 kg (11 lbs)

Finish

Electro-phoretic black plate

Accuracy

±8 µm open loop, 1.0 µm
with optional linear scales

Flatness

5 µm

Angular Accuracy

±2 arc seconds

* Specifications valid only if used with Prior controller.

PRIOR
Scientific

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Specifications subject to change without notice.