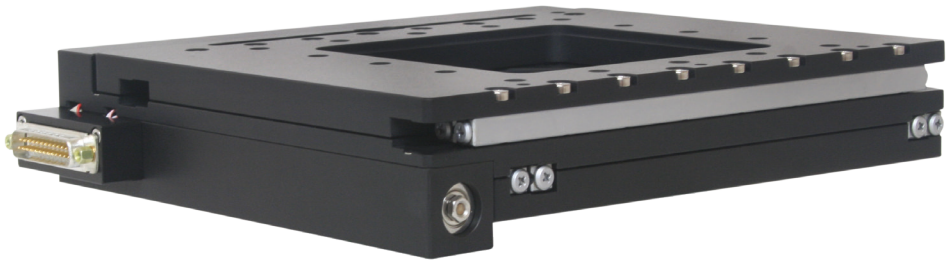
APPLIED SCIENTIFIC INSTRUMENTATION

OE-1250 GEN II MS-Stage



ASI has designed the OE-1250 GEN II Stage specifically for manufacturers to be configurable and easily integrated into their systems. The OE-1250 Stage has custom mounting options, flat top designed with multiple configurations, higher load capacity, precise motion, and high repeatability. The OE-1250 provides controlled linear motion alignment, orthogonal movement, and lower driving friction. The stage retains the high resolution, and high repeatability, of all ASI microscope stages. All axes derive their precise control through the use of closed-loop DC servomotors employing high-resolution rotary encoders for positioning feedback. By using closed-loop control of the stage position, there is no chance that the stage will become lost, as can occur with open-loop micro-stepped stages after a number of moves and direction changes. The OE-1250 XY stage utilizes crossed-roller slides, high-precision lead screws, and zero-backlash miniature geared DC servomotors for smooth and accurate motion. The microprocessor-controlled OE-1250 control unit provides for RS-232 and USB communication with a host computer.

Features

- Closed-loop DC servo control of the X and Y axes for precise positioning
- Wide dynamic speed range with XY joystick control
- Works with ASI's proven Z-axis drives
- Backlit LCD display shows the coordinates
- "Zero" and "Home" button for simple stand-alone operations
- Compact ergonomic tabletop control unit size is 6"D x 9"W x 3"H
- Microprocessor control with RS-232 serial and USB communications
- Proven operation with many popular software packages
- Suitable for stand-alone, OEM, and specialty applications
- Custom mounting options
- Flat top design
- Multiple top plate configurations
- Higher load capacity
- Limbered limits (adjustable dove tail design)
- Higher orthogonal motion
- Controlled linear motion alignment
- Lower friction

Specifications for Standard Configuration

XY axis range of travel	125 mm x 125 mm
XY axis resolution (rotary encoder step)	0.022 µm
XY axis RMS repeatability	< 0.7 µm
XY axis maximum velocity	7 mm/sec

Lead Screw Options

Lead Screw Pitch Options	Rotary Encoder Resolution	Maximum Speed
12.70 mm (Super-coarse)	44 nm	14 mm/sec
6.35 mm (Standard)	22 nm	7 mm/sec
1.59 mm (Fine)	5.5 nm	1.75 mm/sec
0.635 mm (Extra-fine)	2.2 nm	0.7 mm/sec

**Standard Lead Screw Accuracy is 0.25 µm per mm.*

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