

# MicroScan Series of Microscopy Scanning Stages

These low-profile, piezo-driven stages have been designed specifically for microscopy applications. For visualizing specimens or samples on standard microscope slides (1" x 3"), the Thorlabs MicroScan piezo scanning stages provide a convenient mechanism for precise position control of a sample with submicron repeatability. When combined with a piezo controller, this system is all that is needed for complete computer control of positioning with active location feedback. For scanning purposes, this means the user can scan a sample, add reagents, wait for a physiological process, and then rescan and be assured that the same point in the sample is being imaged. The closed-loop active feedback ensures correct positioning with a resolution on the order of 25 to 30nm (see specifications) and submicron repeatability. These stages provide active feedback to compensate for thermal changes and other factors that might lead to stage drift. These stages are ideal for laser scanning microscopy setups for 2D or 3D data collection.

There are three models of piezo stages available: vertical scanning (SCZ100), 2D scanning (SCXY100), or 3D scanning (SCXYZ100). Alternatively, these piezo stages may be used with the MAX200 series (see page 626) long travel stages to yield precise sample positioning over a long range of travel.

These stages are compatible with our piezo controllers: BPC202, BPC203, or BPC103 (see pages 364-370 for the full line of piezo controllers).

## MicroScan Family Features

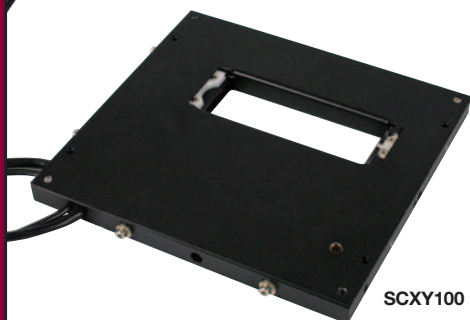
- Compact, Low Profile
- Accurate, Reliable Sample Positioning
- Compatible With a Wide Range of Microscope Slides and Petri Dishes
- Fully Compatible With MAX200 and MAX201 XY Long Travel Stages
- Allows Fast Optical Scanning
- Closed-Loop Control Based on Strain Gauge Feedback



SCZ100

## SCZ100 Specifications

- **Travel:** 100μm (Z)
- **Positioning Resolution:** 25nm
- **Feedback:** Strain Gauges
- **Load Capacity:** 100g Centered on Top Surface
- **Resonant Frequency:** >70Hz
- **Drive Voltage:** 75V
- **Dimensions:** 123mm x 134mm x 22mm (4.8" x 5.3" x 0.9")
- **Weight:** 0.5kg Nominal



SCXY100

## SCXY100 Specifications

- **Travel:** 100μm (x, y)
- **Max Load:** 100g (Centered on Top Surface)
- **Positioning Resolution:** 25nm
- **Resonant Frequency:** >150Hz Allows High-Speed Scanning
- **Thermal Stability:** 1μm/°C
- **Feedback:** Strain Gauges
- **Weight:** 0.25kg Nominal
- **Recommended Controllers:** BPC201, BPC202, or BPC203



SCXYZ100

## SCXYZ100 Specifications

- **X- and Y-Axis Travel:** 100μm
- **Z-Axis Travel:** 80μm
- **Positioning Resolution:** 25nm
- **Feedback:** Strain Gauges
- **Load Capacity:** 100g on Top Surface
- **Stiffness:** 0.4N/μm in X or Y
- **Resonant Frequency:** >70Hz
- **Max Voltage:** 75V

ITEM#	\$	£	€	RMB	DESCRIPTION
SCZ100	\$ 3,230.00	£ 2,034.90	€ 3,003.90	¥ 30,846.50	MicroScan 100μm Z Scanning Stage
SCXY100	\$ 4,709.00	£ 2,966.70	€ 4,379.40	¥ 44,971.00	MicroScan XY Microscopy Scanning Stage
SCXYZ100	\$ 6,120.00	£ 3,855.60	€ 5,691.60	¥ 58,446.00	MicroScan XYZ Microscopy Scanning Stage
SCXYZ100B	\$ 9,990.00	£ 6,293.70	€ 9,290.70	¥ 95,404.50	Kit Including SCXYZ100 and BPC203