

1200 Series Laser Benchtop Micrometers

This benchtop series incorporates transmitter, receiver, processor electronics and an easy-to-use touch screen/keypad interface in a single, convenient package. With built-in self-calibration and Z-Mike's uncompromising accuracy, the 1200 Series is your ticket to improved product quality and reduced scrap and rework.



All 1200 Series Laser Benchtop Micrometers Give You:

- NIST-traceable accuracy
- Exceptional repeatability
- Built-in, automatic calibration
- Incredibly easy-to-use interface
- Instant data display on touchscreen
- Ready-to-mount standard and high-precision motorized fixtures and accessories
- A wide range of dimensional measurements with just one gauge
- Minimal operator training—takes only minutes to learn

Specifications—1200 Series Laser Benchtop Micrometers

	1210	1210 Gold	1220	1220 Gold
Measurement Range¹	0.005 to 1.0 in. (0.1 to 25.4 mm)	0.005 to 1.0 in. (0.1 to 25.4 mm)	0.010 to 2.0 in. (0.25 to 50 mm)	0.010 to 2.0 in. (0.25 to 50 mm)
Repeatability	±0.000012 in. (±0.3 μm)	±0.000005 in. (±0.13 μm)	±0.000020 in. (±0.5 μm)	±0.000010 in. (±0.25 μm)
Linearity	±0.000036 in. (±0.9 μm)	±0.000020 in. (±0.5 μm)	±0.000060 in. (±1.5 μm)	±0.000030 in. (±0.76 μm)
Measurement Area Passline	2.21 in. (56.1 mm)	2.21 in. (56.1 mm)	3.05 in. (77.5 mm)	3.05 in. (77.5 mm)
Measurement Area Depth of Field	±0.060 x 1.0 in. (±1.5 x 25 mm)	±0.060 x 1.0 in. (±1.5 x 25 mm)	±0.125 x 2.0 in. (±3 x 50 mm)	±0.125 x 2.0 in. (±3 x 50 mm)
Laser Beam Spot Size¹	0.005 in. (125 μm)	0.005 in. (125 μm)	0.010 in. (250 μm)	0.010 in. (250 μm)
Laser Beam Velocity	2,000 in./sec (50 m/sec)	2,000 in./sec (50 m/sec)	4,000 in./sec (100 m/sec)	4,000 in./sec (100 m/sec)

¹ Models 1210 and 1210 Gold available with special 0.002 in. (50 mm) laser beam spot size designed for applications measuring small parts or characteristics.

Laser Bench Micrometers

1200 Series

- ◆ NIST traceable
- ◆ Excellent repeatability and resolution
- ◆ Automatic calibration

The Z-Mike 1200 Series Laser Micrometers are the world's most accurate, noncontact benchtop micrometers. These cost-effective, high-performance gauges offer laboratory precision with machine-shop durability. For use in the lab or on the shop floor, the 1200 combines the benefits of absolute measurement accuracy; repeatable and reproducible high-speed measurement; and simple operation to ensure increased productivity with the highest degree of measurement certainty.

Call today for a demonstration!



1202HP Laser Micrometer

Features

- ◆ Automatic calibration — needs no mastering or re-calibration
- ◆ Dimensional and statistical data is displayed instantly
- ◆ Standard work-holding fixtures
- ◆ High-precision motorized fixtures

Benefits

- ◆ Absolute dimensional measurement accuracy
- ◆ A single gauge accommodates a wide dimensional range
- ◆ Operator training takes only minutes

SPECIFICATIONS - 1200 SERIES BENCHTOP MICROMETERS

	1202B	1202HP	1201B	1201HP
Measurement Range ¹	0.003 to 1.0 in 0.08 to 25.4 mm	0.003 to 1.0 in 0.08 to 25.4 mm	0.010 to 2.0 in 0.25 to 50.8 mm	0.010 to 2.0 in 0.25 to 50.8 mm
Repeatability ²	±0.00001 in ±0.3 µm	±0.00001 in ±0.2 µm	±0.00002 in ±0.5 µm	±0.00001 in ±0.3 µm
Accuracy ³ Remastered Mode	±0.00002 in ±0.4 µm	±0.00001 in ±0.3 µm	±0.00003 in ±0.8 µm	±0.00002 in ±0.5 µm
Absolute Linearity ³	±0.00003 in ±0.9 µm	±0.00002 in ±0.6 µm	±0.00006 in ±1.5 µm	±0.00004 in ±1.0 µm
Resolution	0.001 to 0.00001 in 0.0001 mm Selectable	0.001 to 0.00001 in 0.0001 mm Selectable	0.001 to 0.00001 in 0.0001 mm Selectable	0.001 to 0.00001 in 0.0001 mm Selectable

¹Gap measurement accuracy valid for range ≥ 0.020 inch (≥ 0.5 mm).

²Specified repeatability applicable with 256 or more scans averaged, based @ 2σ (95% confidence level).

Repeatability is $\pm 0.0015\%$ of measured dimension, whichever is larger for 1201B and 1202B; $\pm 0.0010\%$ of measured dimension, whichever is larger for 1201HP and 1202HP.

³Based on standard factory calibration @ 68°F (20°C) with 50% relative humidity. Note: May require user field remastering in nonstandard environmental conditions.