



Advanced Test Equipment Rentals
www.atecorp.com 800-404-ATEC (2832)

LSM-3100

LASER SCAN MICROMETER

User's Manual

Mitutoyo

11

SPECIFICATIONS

This chapter describes the display unit specifications and accessories.

11.1 Display Unit (LSM-3100) Specifications

(1) Specifications

Code No.	544-053 (mm/inch) 544-052 (mm/E)
Digital display	8-digit display for data and 3-digit display for other, a total of 11 digits.
Standard measuring functions	Measurement program memory function (Up to 10 programs No.0 to 9)
	Segment designation: 1 to 6
Averaging method	Simple average 1 to 2048 times
	Moving average 16 to 2048 times
	MEAS RATE 1 (8 times) MEAS RATE 2 (32 times) MEAS RATE 3 (128 times) MEAS RATE 4 (256 times): according to set Memory switch (8~512 times).
	GO/NG judgment (GO, ±NG)/ Reference value setting function/ Offset function/ Data output function/ Sample measurement function/ Statistical processing function/ Workpiece position indicator LED/ Key entry prohibiting function / mm ↔ inch changeover function/ Dual-gage calibration
Special functions (Selected by the DIP switch settings)	Selection of resolution/ Transparent object measuring function (only SEGs 1 and 2 can be used)/ Dual- program measurement/ XY measurement (average of X and Y, difference of X and Y)/ Dual-unit measurement/ Multi-limit measurement (5 steps of ±NG, OK)
Special functions (Selected by the memory switch settings)	Adjustment of workpiece position indicator LED/ Buzzer function ON/OFF/ Result display latch releasing timer/ Display of a comma (,) to mark the thousandths position /Setting the display content for no- workpiece/Setting the execution content during single-run measurement/Designating the I/O IF RUN input/ Setting the RS-232C delimiter and parity check/Automatic workpiece detection
Scanning control signal connector	Provided
Foot-switch terminal	Provided
Remote control connector	Provided
Power switch	Key switch used
Built-in interface units	RS-232C (EIA RS-232C conforming)/Printer interface Digimatic code output interface Connectable to the M-SPC devices.
Optional interface unit	2 units can be mounted above in the expansion slots.
Power supply	100 to 240 V AC, 50/60Hz, 30VA
Fuse	φ 6.5 x 30 1A 250V slow-blow type
Operating environment	Ambient temperature: 0°C to 40°C Relative humidity: 80% or less (without condensation)
Storage environment	Ambient temperature: - 20°C to 70°C Relative humidity: 95% or less (without condensation)
Mass	4kg

(2) Standard Accessories

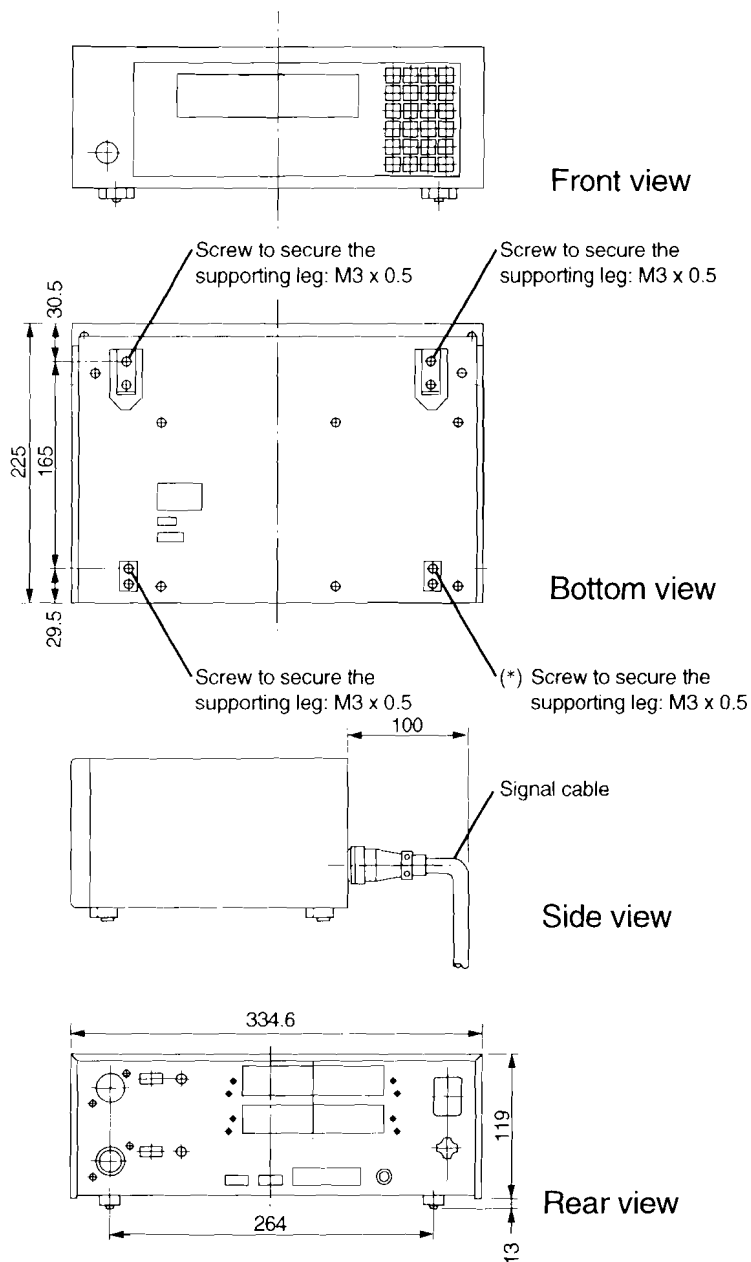
Part No.	Item	Quantity
	Power cable (varies depending on the country)	1
934626	GND lead wire (4m)	1
214234	Fuse (ϕ 6.5 x 30mm, 1A slow-blow)	1
214938	PJ-2 connector	1
214740	Power key switch	2
956042	Short-circuiting pin*	1
223654	Connector plug: CN-3822 (Manufacturer: Sato Parts)*	1

*: Mounted on the display unit.

(3) Optional Accessories

Part No.	Item
956119	GP-IB interface unit
956120	BCD interface unit
956121	I/O interface unit (with analog output)
956074	Relay analog output interface unit
956958	Second analog output interface
936937	Digimatic code output cable
956955	Sub-display (provided with interface)
956127	Expansion circuit board for dual-unit measurement
214188	I/O connector: 57-30360 (Manufacturer: DDK)
216987	BNC (analog output) adapter: Model 1296 (Manufacturer: POMONA)
937179T	Foot switch
956445	Abnormal data elimination program (centerless grinder specification)

(4) External view and dimensions of the display unit (LSM-3100)



- The four supporting legs can be removed by loosening the four screws that secure them.
- Use these screw holes for mounting the display unit.
- The screw hole marked with an asterisk (*), must have a screw with a length of not more than 3mm (measured from the bottom plate surface). There is a circuit board installed behind this hole (thickness 1.2mm).
- Use screws with a length of not more than 6mm in the other three positions.