



Figure 1-1 FSM128L

The FSM128 and FSM128L are desktop units for measuring 200mm and 300mm wafers. They consist of the main scanner unit, a computer (not shown), monitor, keyboard and mouse. The unit is shown in the wafer load position.

TOOL FEATURES

- 1) 3D Mapping.
- 2) The FSM128 has an automated table for ergonomic wafer loading.
- 3) Software interface is designed in the Windows™ user-friendly environment.
- 4) Allows easy access to menus, toolbars, status bars, and file tree views.
- 5) Data can be exported for use with other software programs.
- 6) Wafer stress measurements.
- 7) Wafer flatness measurements.

SPECIFICATIONS

	128	128L
Wafer Sizes	UP TO 200mm	UP TO 300mm
Height	16"	16"
Width	14"	14"
Depth	20"	28"
Weight	55lbs.	67lbs.
Power	110-230 VAC (auto-switching), 50-60Hz, 3A	110-230 VAC (auto-switching), 50-60Hz, 3A
Fuse	3amp 250v 4amp 250v (24v power supply)	3amp 250v 4amp 250v (24v power supply)
Laser	Diode Laser, Wavelength = 650nm, 780nm Laser Power = 5mW, (Class 1)	Diode Laser, Wavelength = 650nm, 780nm Laser Power = 5mW, (Class 1)
Computer	Pentium processor, CDRW, 40gbHDD, Windows ME or XP	Pentium processor, CDRW, 40gbHDD, Windows ME or XP

SAFETY FEATURES OF THE 128

The FSM 128 utilizes laser technology to measure thin film stress. Various precautions are designed into the system to protect operators from exposure to the laser beams. First, a metal housing forms a containment barrier around the scanner device. The door for wafer loading has an interlock switch that will disable power to the laser if the door is open. An EMO button is provided to disconnect and disable energizing the tool in an emergency. Additional safety features provided by the system include automated software control of laser operations. Together with appropriate operating procedures and operator training, these features provide the necessary protection from operator injury and equipment damage.

EMO EMERGENCY OFF

FSM 128 is equipped with an Emergency Main Off (EMO) switch on the front panel. The EMO switch will stop the machine in case of an emergency. The EMO switch will power



FRONTIER SEMICONDUCTOR
1631 North First Street, San Jose, California 95112
Model: FSM 128 Serial No. 060609-648
Power: 110/220 VOLTS
Amps: 3 AMP
Hz: 50/60 HZ
Mass
21 CFR 1040.1 Class 1 laser product

FSM Frontier Semiconductor Measurements, Inc.
1631 North First Street, Suite 100
San Jose, California 95112
Date: 6/9/06 Model#: FSM128
Serial#: 060609-648
This laser product complies with 21 CFR 1040.10
DANGER Invisible Laser Radiation, when
opened and interlock defeated.
AVOID DIRECT EXPOSURE TO BEAM

