

# STM-100 / MF

Thin Film Deposition Thickness / Rate Monitor



## SYCON STM-100/MF

The Model STM-100/MF Thickness/Rate Monitor from Sycon Instruments, Inc. is a precision mass and film thickness measurement instrument for use in thin film deposition processes and other quartz crystal microbalance applications. The STM-100/MF has proven very tough and reliable. Thousands of durable units are providing stable monitoring of depositions. Easy to setup and use, the STM-100/MF has a history that makes it the one to have for deposition monitoring.

**The STM-100/MF is a world standard, 1000's in use.**

## FEATURES

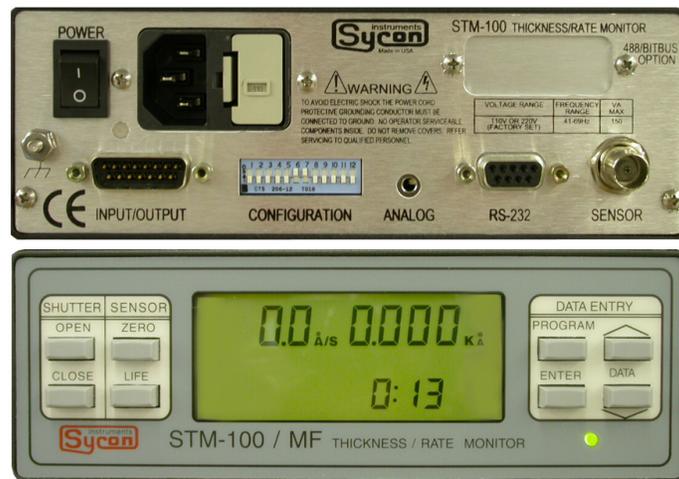
- Multi-Film Program Storage
- High Resolution and High Speed Measurement Engine
- 1 Å Thickness Resolution
- 0.1 Å/Sec. Rate Resolution
- 4 measurements per second
- Multiple function high readability Back-lit LCD
- Shutter and Limit I/O Relay Outputs
- Analog Output of Rate or Thickness  $\pm 0$  to 10V 12 bit resolution
- Low Maintenance Sensor Design
- Industry Standard 6 MHz Sensing Crystal
- RS-232 Interface
- LabVIEW™ Front Panel Interface



Sycon Instruments, Inc.  
6757 Kinne Street  
East Syracuse, New York 13057  
Tel. (315) 463-5297 Fax (315) 463-5298  
Info@sycon.com

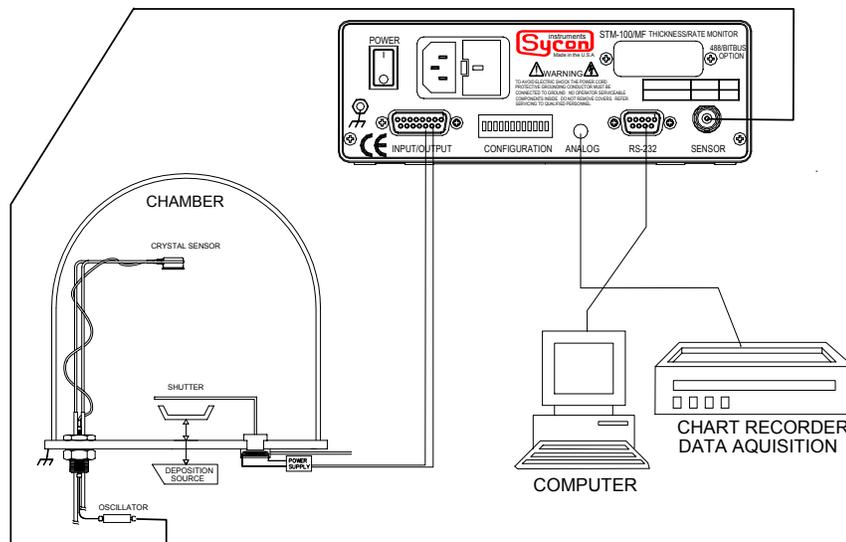
# STM-100 / MF Specifications

<b>Multi Mode Operation</b>	Thickness/Rate Monitor Negative Thickness Monitor Sensor Frequency Monitor
<b>High Speed High Resolution High Accuracy Measurement Range</b>	Four Measurements per second 0.1Å per second ±0.5% thickness ±1 count 500KÅ Aluminum Equivalent
<b>Relay Output</b>	Four 1.5 Amp SPST N.O. Contacts 1) Shutter Control 2) Thickness Set point 3) Timer Set point 4) Crystal Failure
<b>Remote Input</b>	Four TTL Compatible inputs 1) Open Shutter 2) Close Shutter 3) Zero Thickness 4) Zero Time
<b>Setpoints</b>	End Thickness 0.000 to 9999KÅ Setpoint Thickness 0.000 to 9999KÅ Timer 00:00 to 99:59 m:s
<b>Power Requirement</b>	120/240 VAC 50/60 Hz 2.5 VA

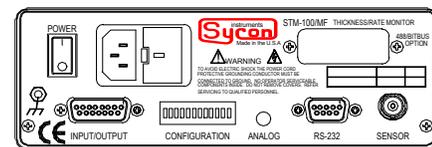
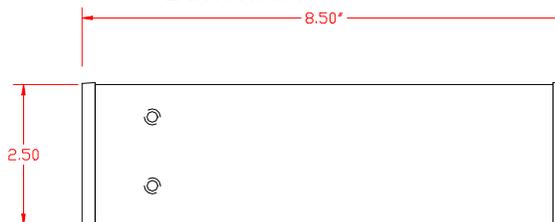
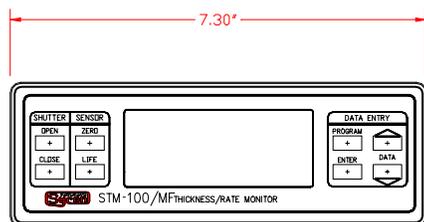


## Ordering Information

- 500-044 STM-100 / MF Base Configuration
- 500-089 STM-100 / MF package, includes sensor
- 500-047 SHMX-4, 4 Sensor Multiplexer
- 500-119 STM-100 / MF with SHMX-4
- 500-103 Low profile sensor Package
- 500-021 IEEE 488 option module
- 500-117 10 Pack Gold Sensor Crystals
- 014-008 19" Rack mount Kit
- 014-009 19" Dual Rack mount Kit



## Dimensions



Sycon Instruments, Inc.  
6757 Kinne Street  
East Syracuse, New York 13057  
(V) (315) 463-5297 (F) (315) 463-5298  
[www.sycon.com](http://www.sycon.com) Info@sycon.com