
Thin Film Controller

Thin Film Quartz Crystal Deposition Rate Controller!

Features

- Multi Sequence Multi-Film Process Control
- High Resolution, and accuracy
- Two sensor capability
- RS232 interface for serial communication
- Touch panel LCD display
- 6MHz standard crystal
- Half Rack standard mounting



The **STC-2000A** offers features and performance previously not available in a thin film deposition controller. Its advanced electronics, LCD display, storage for nine film programs and programmable input / output structure give the user versatility and performance. It uses the time-proven 6 MHz oscillating quartz crystal as the sensor device.

The STC-2000A is constructed with advanced microprocessor technology. This enables the direct solution of the complex mathematical equation associated with the frequency shift versus mass loading characteristics of the quartz crystal sensor. Its computational power allows the measurement of the material accumulated on the sensor crystal to be accurately converted to film thickness using the exact equation; inaccuracies due to approximations and limited ranges of material constants do not contribute to thickness and rate errors. An innovative frequency measurement system allows the STC-2000A to acquire and display 10 measurements / second with 0.01 Å/Sec rate resolution on each of the sensor input channels. The standard STC-2000A is equipped with 8 relays, 8 opto-coupled inputs, a RS-232 computer interface, and high-resolution analog control and recorder outputs.

Key Benefits

Two sensor capability at reasonable pricing
High resolution, and accuracy
Standard film programs, and sequence recipes storage
240 x 64 pixel monochrome LCD display with backlight
Internal Voltage Regulation and Temperature Compensation Circuits

Options/Accessories

Additional 8 input, and output cards
Low profile sensor package
Bakeable sensor heads on 35CF (2.75") flange with BNC inputs
Swagelok water connections



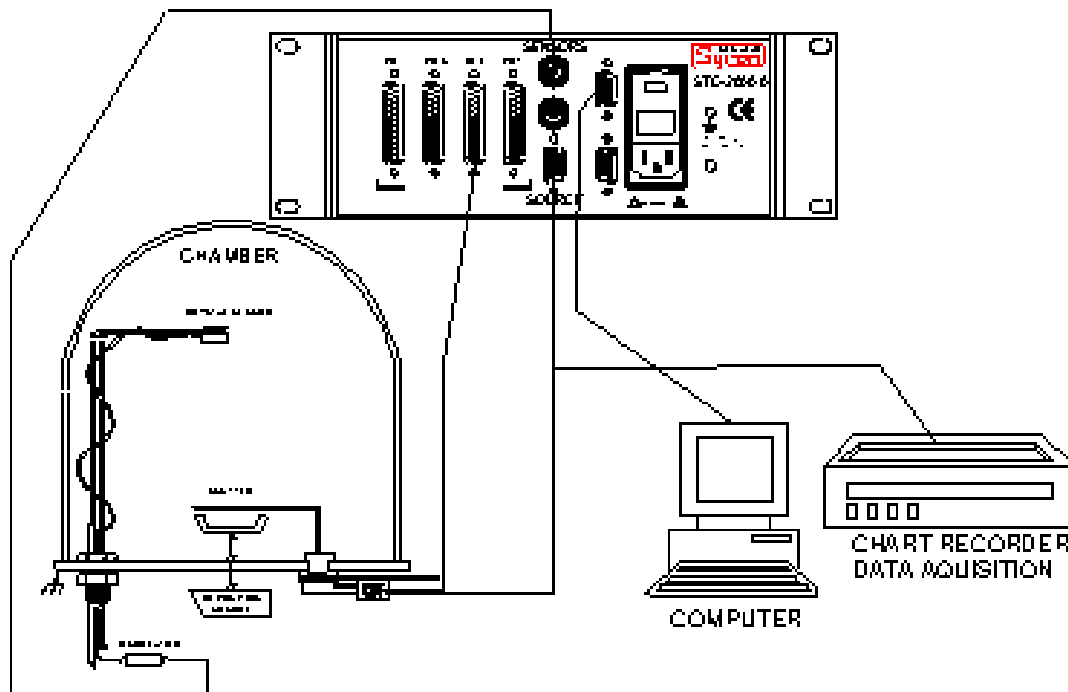
VIN KAROLA INSTRUMENTS

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SPECIFICATIONS

Resolution	0.02 A ² per sec (Aluminum)
Accuracy	+/- 0.5% thickness +1count
Speed	10 measurements/sec
Measurement Range	500KA (Aluminum equivalent)
Sensor Capacity	2
Operation	Menu driven Touch Panel LCD for parameter entry, 5 membrane keys (Stop, Start, Menu, Manual, Zero)
Programmable Film	Material Density 0.4 to 99.99 gm/cc
Parameters	Z-Factor 0.1 to 9.999
Set Point Limits	Thickness (2), Time (1)
Rate Control	0.0 to 999.9 A ² per sec
Analog Outputs	+15 bit resolution
Rack Mount	3 1/2" standard half rack mount
Display	Touch screen LCD
Power Requirements	90-264 VAC, 50/60Hz, 180 VA max
Operating Range	0 to 40°C
Weight	4.5 lb (2 Kgs)



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