

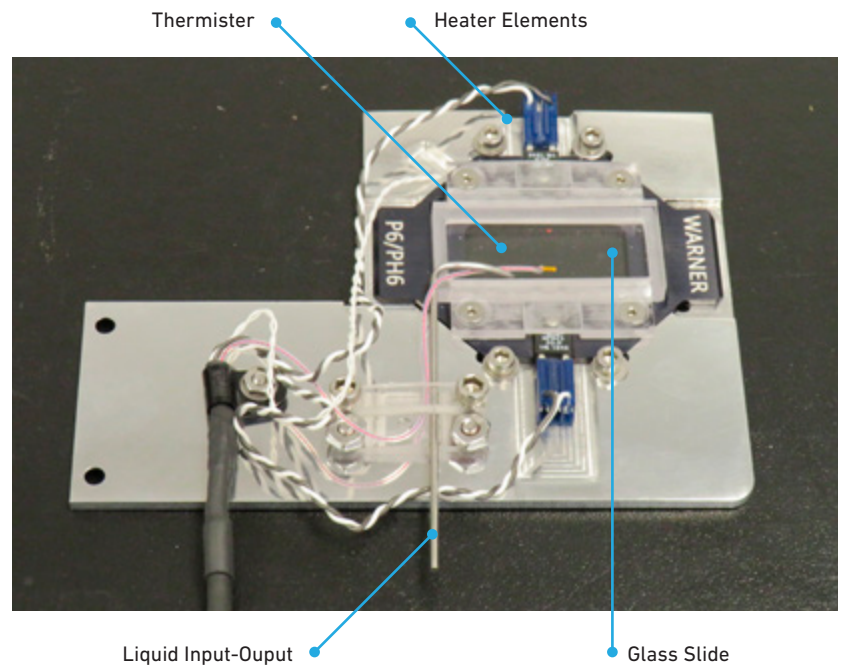
LS AFM Liquid Cell/Heater

Model ID: LS-Heat

The **LS Heat** option is a combination open liquid cell and heater that is compatible with the LS AFM.

In operation, the liquid cell replaces the glass slide holder in the LS AFM.

The LS-Heat sample stage includes metal tubing for inputting liquid into the cell, a thermister for measuring the liquid's temperature, a glass slide, and two heating elements.



Included with this option is a TC-324C heater controller from Warner Instruments.



Maximum Output Voltage
15 VDC

Maximum Output Current
1.5 A

Minimum Load Resistance
10.0 Ω

Manual Voltage Range
0.0 to 15.0 VDC

Maximum Output Power
22 W into a 10 Ω Load

Power Requirements
95-130 or 200-260 VAC, 50/60 Hz

Power Fuse
**(5x20 mm) 0.5 A SB for 95-130 VAC and
0.25 A SB for 200-260 VAC**

Front Panel BNC
**Input/Output T2 Thermistor
Reporting 100 mV/C**

Rear Panel BNC
Output T1 (Control) Reporting 100 mV/C

Temperature Range
Ambient to 65°C

Internal Set Temperature
22°C to 65°C

External Set Temperature
Ambient to 65°C

Meter Display
3.5 Digit LED Display of °C or V

Meter Readouts
**Set Temperature
T1 (Control) Temperature
T2 (Monitor) Temperature
Output Voltage (to Heater)**

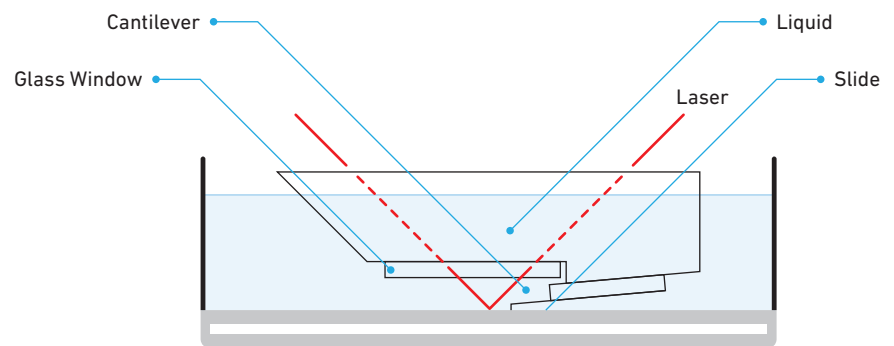
Enclosure (W x H x D)
**43.2 x 8.9 x 30.5 cm
(17.0 x 3.5 x 12.0 in)**

Weight
5.44 Kg (12 lb)

Features of the Heater Controller are:

- » Slow ramped DC power for quiet operation
- » Temperature control from ambient to +65C
- » Manually controlled DC output choices
- » Three feedback loop speeds
- » Independent bath temperature monitoring
- » External input for computer control
- » Open thermistor fault protection
- » Low noise toroidal transformer power supply

The LS Heat option use the Dunk and Scan Z probe holder that is a standard accessory for the LS AFM.



Included with this option are:

- » Liquid Cell Stage
- » Heater Cable
- » Temperature Controller
- » 25 X 50 mm slides
- » 20 ml Hypodermic Syringe
- » Tygon Tubing
- » Manual