



MiniTherm Plus Stage Warmer

All New MiniTherm Plus Stage Warmer

The sleek, low-profile MiniTherm Plus Stage Warmer works with any upright microscope and sperm analyzer or for manual microscope assessment, the MiniTherm Plus keeps the semen sample at the proper temperature for accurate sperm motility and velocity analysis.





The MiniTherm Plus consists of a digital controller and a glass microplate that fits between standard microscope stage clamps.

KEY FEATURES

- Low-profile permits rotation of turret without interference - no adjustment needed to switch objectives
- Allows temperature adjustment from 5°C over ambient temperature up to 60°C
- Portable - can be easily moved between microscopes
- Easily test using included Temperature Validation Slide
- Internal PID calibration (see below) and ability to enter a Shift Value to optimize accuracy
- Key lock feature to prevent inadvertent change in set temperature
- Easy insertion and removal of analysis chamber (push on, slide off) while on stage
- Designed in cooperation with Tokai Hit, a leader in the field

PID CALIBRATION

The MiniTherm Plus uses Proportional Integral Derivative (PID) control for stable temperature maintenance. The MiniTherm Plus controller is calibrated at room temperature $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ($77^{\circ}\text{F} \pm 4^{\circ}\text{F}$) before shipping. If the temperature of the heating plate is not stable in your usage environment, the controller can be recalibrated by performing PID calibration.

EASY INSERTION AND REMOVAL OF CHAMBER WHILE ON STAGE



Push On to Insert Chamber

Holding Clip Keeps Chamber Secure

Slide Off to Remove Chamber

Validation Slide

Each MiniTherm Plus comes with a temperature validation slide which is used to test the MiniTherm Plus. The Validation Slide turns green when at 37°C, brown when below 37°C and blue when above 37°C.



COMPARISON CHART

MiniTherm Plus vs. MiniTherm Legacy

	LEGACY	PLUS
Portable	✓	✓
Compatible with all upright microscopes	✓	✓
Test using Temperature Validation Slide	✓	✓
Adjustable Temperature		✓
Digital display of current temperature		✓
Allows rotation of turret without interference		✓
Internal PID calibration for temperature control		✓
Key Lock feature to prevent changes		✓



Specifications

GENERAL SPECIFICATIONS		
Dimensions & Weight	Plate Heater:	84mm x 47mm x 6mm 3.31in x 1.85in x 0.24in 31g (1.1oz)
	Controller Unit:	132mm x 82mm x 35mm 5.20in x 3.23in x 1.38in 151g (4.85oz)
Power Source	100-240VAC	
Current Rating	1.6A	
Max Power Consumption	50W	
Method	PID Control	
TEMPERATURE CONTROL		
Increments	0.1°C	
Setting Method	Digital switch using Up / Down Keys	
Max. Temperature Setting	60.0°C	
Min. Temperature Setting	0.0°C	
Controllable Temperature	Ambient +5°C ~ 60.0°C	
Temperature Accuracy	±0.1°C	
Sensor	Platinum resistance thermometer (Pt 100 Ω)	

For further information contact Microm UK Ltd.

admin@microm.co.uk

tel: 01869255760

www.microm.co.uk