

## Warm Stages for Microscopes

Linkam warm stages provide a simple, low cost solution for an accurate, temperature controlled platform from ambient to 60°C. They are mounted directly on top of the microscope stage and are suitable for most commercially available microscopes.

### Warm stages for Ambient to 60°C Applications

Linkam warm stages are found in cell biology labs, hospitals and IVF clinics all over the world. This is due to several key design features:

- The warming plates are incredibly thin, as little as 0.5mm, so that short high resolution objective or condenser lenses can be used
- A platinum resistor temperature sensor is used for higher accuracy and stability than the more commonly used thermocouple.
- The low voltage power supply uses automatic feedback so that there are no temperature fluctuations when loading or removing the sample.
- Sophisticated CAD designed bi-filar heating element that covers the entire surface of the stage to maintain uniform temperature distribution in the slide or dish.
- The heating element is designed so that no heater current induced fields will influence the sample.
- Stages are designed to fit into the microscope table enabling full access to the sample.
- The stage controllers are extremely simple and intuitive (MC60), set temperature then press heat.
- All equipment is EMC emissions tested so that it can be safely used in hospital and IVF environments.
- A special DC controller (DC60) is available to avoid microscopic vibrations seen when using AC pulsed power to heat the stage. This is crucial when using high magnification or confocal observations.



THL 60-16 Warm Stage



THD 60-16 Warm Stage



THZAV 60 Warm Stage

These stages are designed to hold a specified temperature to  $\pm 0.1^\circ\text{C}$  from ambient to 60°C. They are an accurate temperature control platform for inverted or upright microscope applications where it is crucial to maintain a stable temperature to within 0.1°C in the sample whether mounted in a petri dish or on a microscope slide.

Two stages can be controlled simultaneously so that a second set of samples awaiting analysis can be maintained at the same temperature as those on the microscope.

The table overleaf shows the many different types of warm stage made by Linkam. The standard warm stages are those which can be used on upright and inverted microscopes, they are simply mounted directly on top of the microscope table.

The other models on the next page are microscope specific stages. If you have any problems then please contact us directly.

## Standard Warm Stages

TH 60-6 Warm Stage 75 x 50 x 1.4mm with 6mm aperture

TH 60-68 Warm Stage 75 x 50 x 1.4mm with 6 x 8 mm aperture

THL 60-8 Warm Stage 100 x 100 x 1.4mm with 8mm aperture

THL 60-12 Warm Stage 100 x 100 x 1.4mm with 12mm aperture

THL 60-16 Warm Stage 100 x 100 x 1.4mm with 16mm aperture

THL 60-12x25 Warm Stage for viewing microscope slides with 12 x 25mm aperture

## Olympus Specific Warm Stages

THO 60-10 Warm Stage for OLYMPUS IMT2, IX 70/50 inverted microscope with 10mm aperture

THO 60-16 Warm Stage for OLYMPUS IMT2, IX 70/50 inverted microscope with 16mm aperture

THO 60-15x20 Warm Stage for OLYMPUS IMT2, IX 70/50 inverted microscope with 15 x 20mm aperture

TH 60-SZH Warm Stage 205 x 155 x 2mm for OLYMPUS SZH Stereomicroscope with 16mm aperture

## Nikon Specific Warm Stages

THN 60-10 Warm Stage for NIKON Diaphot and TE series inverted microscope with 10mm aperture

THN 60-16 Warm Stage for NIKON Diaphot and TE series inverted microscope with 16mm aperture

THN 60-15x20 Warm Stage for NIKON Diaphot and TE series inverted microscope with 15 x 20mm aperture

TH 60-SMZ Warm Stage 205 x 155 x 2mm for NIKON Stereomicroscope with 16mm aperture

## Zeiss Specific Warm Stages

THA 60-16 Warm Stage for ZEISS Axiovert inverted microscope with 16mm aperture (Axiovert 200M)

THA 60-20 Warm stage for Zeiss Axiovert inverted microscope with 20mm aperture

TH 60-SZA Warm Stage for ZEISS Stereozoom microscope with 16mm aperture

THA 100 Warm table with inbuilt stage for Zeiss Axiovert 100 with 16 mm aperture

THA 25 Warm table with inbuilt stage for Zeiss Axiovert 25

WS200-20 Warm Stage for Zeiss Stemi 1000 and 2000 Microscope

THZAV-60-16 Warm Stage for Zeiss Axiovert 100/135/200(to replace K-plate in universal stage)

## Leica Specific Warm Stages

THF 60-16 Warm Stage for LEICA Fluovert & Labovert microscopes with 16mm aperture

THD 60-16 Warm Stage for LEICA DMIRB inverted microscope

TH 60-W80 Warm Stage (205 x 155 x 2mm) for the Leica Wilde with 80mm base insert

TH 60-W120 Warm Stage (205 x 155 x 2mm) for the Leica Wilde with 120mm base insert

WS200-HL Warm Stage for Leica stereo Transmitted Light Base(205x155mm with 10mm aperture)

WS110R-DMIL Warm stage for Leica DMIL (Table must be returned to us by customer for modification)

## Warm Stage Controllers

MC60 Basic Warm stage Controller

DC60 Advanced warm stage controller for high magnification applications

MC60D Dual channel warm stage controller for simultaneous control of two stages



MC60 Controller



DC60 Controller