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*Equipment for cellular & electrophysiology research*

# HWPT-96OL/NK/384/LID Transparent ITO stages, heaters & lid

## Transparent stage heater/well plate heater/lid



**HWPT-96OL**



**HWPT-384[S]**

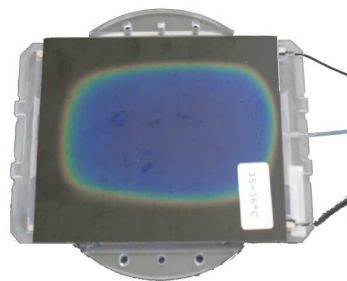


**HWPT-384 + HWPT-LID**

The **HWPT-96OL** (for Olympus), **HWPT-96NK** (for Nikon) **Transparent stage/96 Well plate heater** is made up of the **HI-711Dp ITO Transparent heater** in the **MSA-OLH711** or **MSA-NKH711 Microscope stage adapters**, along with the **TH-10Kmp Thermistor probe** and **CAB-HXTH/DIN cables**. This provides a low profile heater for 96 well plates and provides **uniform heating** ( $\pm 2.5^\circ\text{C}$  @  $36^\circ\text{C}$ ) for the **inner 60 wells**. The outer wells can be used but the temperature in these wells will be lower. The ITO glass is 0.7mm thick while the glass plus stage adapter is 6.5mm thick.

Well plates are held in position by tabs on the edge of the heater plate so that well plate will not slide when the heated stage is attached to a moveable stage. The stage is compatible with Coostar, Falcon, Greiner and Nunc 96 well plates (call for other brands).

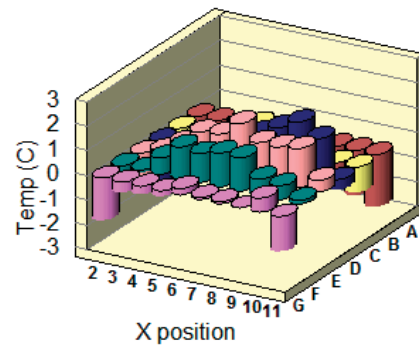
Other structures or chambers sitting on top of the heater can also be heater. In this case the temperature is uniform



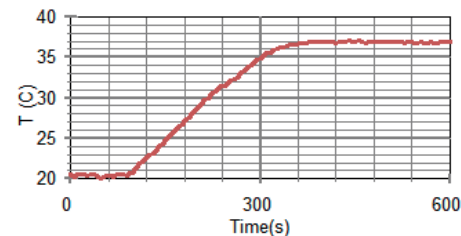
**Liquid crystal sheet 35-36C (brown to blue)**

( $\pm 1^\circ\text{C}$  @  $35.5^\circ\text{C}$ ) in a central area of 5x7cm.

The stage is designed to be connected to the **mTCII/mTC3 2/3Ch micro-Temperature controllers**. One channel is used to regulate the temperature of the heated stage while the other channel(s) can be used either for a roaming probe(s) to monitor individual well temperatures or to control the well temperatures to allow more rapid heating of the wells.

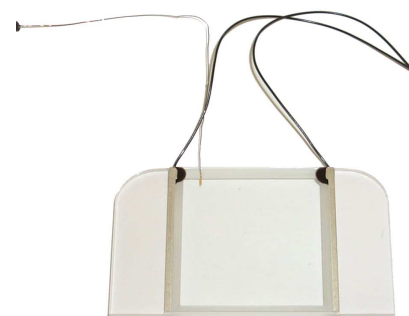


**Well temp vs position- inner 60 wells**



**Well temp vs time**

## BT-I55D Transparent ITO stage



The **BT-I55D Transparent ITO stage** provides a uniformly heated area (approx. 47x47mm; heater 0.7mm thick) for microscopy, electrophysiology applications. It can be fitted in any of our microscope stage adapters. Applications include observation of culture dishes or other tissue chambers. You can also build a tissue chamber directly on the ITO heater. The heater and thermistor probe can be connected to the **TC2BIP 2Ch Temperature controller** for electrophysiology applications or the lower cost **mTCII/mTC3 2/3Ch micro-Temperature controllers** for microscopy applications.