

## Extended Range

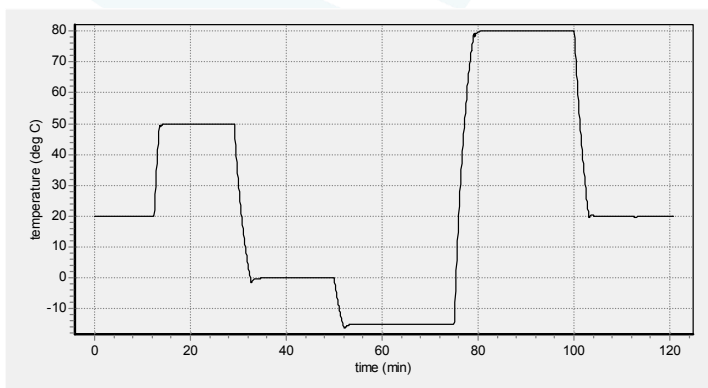
**The TLC 50/E/PTI is a Peltier-based temperature-controlled cuvette holder for use in a PTI Spectrofluorometer. Special construction permits temperatures from below -40 °C up to +150 °C.**

- Rapid, precise control over an extended range of temperatures
- Fully automated through the PTI software package
- Calibrated using a NIST-traceable thermometer
- Ready to install, including rear utility panel
- Variable speed magnetic stirring
- Dry gas purge
- Thermometer probe input
- TC 125 Temperature Controller included

### Specifications:

- Temperature Range\* -40 °C to +150 °C
- Temperature Precision ± 0.02 °C
- Optical Port Dimensions 12 mm high x 10 mm wide
- Probes Accepted Series 400 or Series 500
- Cuvettes Accepted:
  - Standard Cuvette Size 12.5 mm x 12.5 mm O.D.
  - Cuvette Adapters Available 3x3 mm<sup>2</sup>, 4x4 mm<sup>2</sup>, 5x5 mm<sup>2</sup>
  - Microcuvette z Height 8.5 mm (special order 15 mm)

\* Operation below the ambient dew point temperature requires dry gas purge. Operation below -10 °C requires dry gas purge and pre-cooled circulating fluid within 25 °C of the desired temperature. Operation below -25 °C requires the optional WJ-50 Windowed Jacket (see below), dry gas purge and pre-cooled circulating fluid. Temperatures may be controlled as low as -55 °C. Please contact Quantum Northwest for information on achieving temperatures below -40 °C.



Each unit is provided with a performance plot.

### Components included in each purchase

- TLC 50/E Cuvette Holder
- TC 125 Temperature Controller
- Performance Plot and Calibration Data
- Magnetic Stir Bar, Tubing, Quick Disconnect Fittings, Cables, Optical Slits, Opaque Lid



TC 125 Temperature Controller

### Optional Components available

- APOST-1 Accessory Post  
APOST-1 is a plastic post and support clip that may be inserted in the top of the TLC 50 and used to hold tubes, probes and other hardware for special measurements.
- ADPT 3x3, ADPT 4x4, ADPT 5x5 Cuvette Adapters  
Cuvette adapters permit the use of small square cuvettes.
- WJ-50 Windowed Jacket  
The WJ-50 is a plastic cover for the TLC 50 that holds four 1-inch diameter fused silica windows, permitting the passage of light. The WJ-50 provides insulation and prevents condensation on the cuvette when operating at low temperatures.
- T-App Temperature Application Software  
T-App permits external computer control of the TC 125 Temperature Controller, plotting cuvette holder or probe temperatures vs. time, and enabling programming for functions such as temperature ramping.
- BATH 100 Circulator  
The BATH 100 Circulator is a submersible pump, bucket, tubing and fittings used to circulate water or other fluid through the Peltier heat exchanger to draw out heat when the temperature is lowered.