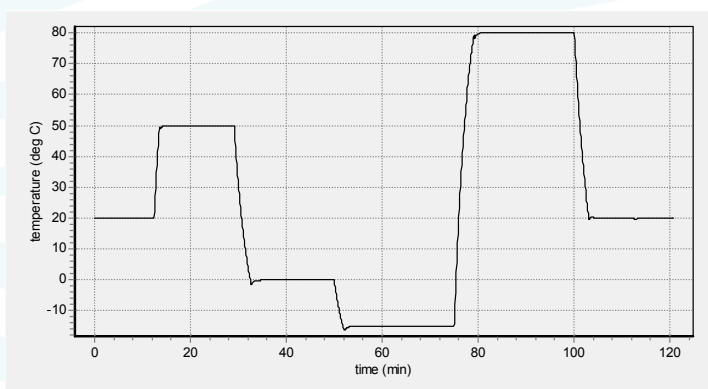


## Extended Range

**The TLC 50/E/PQ is a Peltier-based temperature-controlled cuvette holder for use in an PicoQuant Fluorescence Lifetime Spectrometer. 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 PicoQuant software package
- Calibrated using a NIST-traceable thermometer
- Variable speed magnetic stirring
- Dry gas purge
- Thermometer probe input
- TC 125 Temperature Controller included



Each unit is provided with a performance plot.

## 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.

## Components included in each purchase

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



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.