

Peltier temperature control device

Features:

- temperature control for Solid Liquid (SL) cell and Kinetics / SPR cell
- fast temperature stability

Technical Specifications:

General

- temperature range: 5° - 75° C
- temperature stability: +/- 0.1°C

Temperature sensor

- resistance thermometer PT100

Peltier

- 40 x 40 mm and 53 W for the Solid-Liquid (SL) cell
- 30 x 30 mm and 34.5 W for the Kinetics / SPR-cell
- rapid temperature ramps possible*

Controller: IMAGO 500 (JUMO GmbH & Co KG)

- size: 350 x 260 x 210 mm
- proportional integral derivative controller (PID)
- 2 inputs, configurable via setup software or front keypad as resistance thermometers
- electronic relay output
- 5" colour display with 27 colours
- self optimization system
- new step-response autotune option avoids overshoot while tuning
- serial interface RS 232
- control and data exchange via EP³View

Heat exchange system to transfer heat apart from the peltier

- size: 350 x 260 x 210 mm
- water based heat exchange system

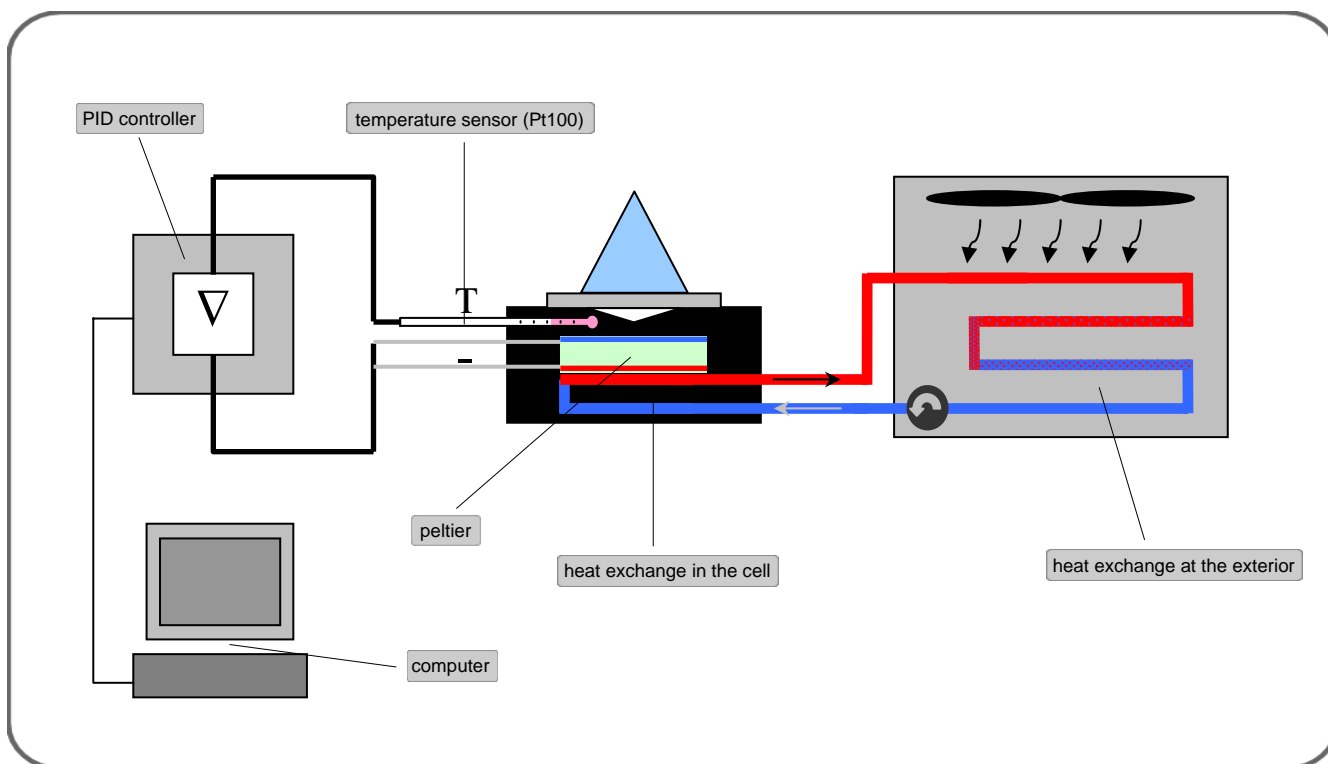


*limited by the cell, the sample, the flow rate and the laboratory temperature

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Setup

The setup displayed as sketch in figure 1 is similar for both cells: Kinetics / SPR-cell and Solid Liquid cell. The temperature sensor, the resistance thermometer PT100, is close to the sample's surface. The peltier is controlled by a proportional integral derivative controller (PID). At the bottom side of the peltier is a water based heat exchange device to remove heat from the peltier and transfer to the surrounding.



Order information

The peltier temperature control device can be ordered as option to the SL cell or Kinetics / SPR cell.