PelTherm
Precise Temperature Control for Lab Automation

Top performance and precise multimodule control
PelTherm is a powerful temperature control system designed as an embeddable module for e.g. laboratory robot stations. It consists of up to 6 autonomous and simultaneous operating peltier-driven temperature control units, 1 control unit and 1 cooling unit.
Accurate temperature control is guaranteed between -2 °C and +80 °C. The max. speed of heating is 10 °C / min, and the max. speed of cooling is 6 °C / min. Each temperature control unit works independently and with excellent accuracy of 0.1°C. Operating under max. load, the entire system maintains a low noise level of only 43.1 dBA (much lower than the noise level of a fridge).

Easy integration to lab-automation equipments
Monitoring the PelTherm is comfortable. The control unit simply has to be connected (USB connection) to the robot’s control center. For integration of the PelTherm controlling software, an application programming interface (API) is provided.
Integration of PelTherm is easy. 3T analytik provides adaptor plates for deep-well plates (DWP), microtiter plates (MTP), lab tubes and plates. For systems operating in a limited space (e.g. clean bench), the control unit as wells as the cooling unit can be installed externally.

Applications
- Pipette robots
- Lab-Automation robots
- Incubators
- Shakers
- Advanced Quartz Crystal Microbalances (QCM)

Thin, Flat and Light - Perfect for Microtiter Plates
Accurate, Precise & Powerful
Fast Heating & Cooling
No Air Turbulances
-2 °C up to + 99 °C

≤43.1 dBA Noise Level

No Heating-up of Pipette Robot Cabinet
Up to 6 Temperature Control Units
Simultaneous & Independent
Easy Integration
### Technical Data

**Supply Voltage & Frequency**
- 100-240 V, 50-60 Hz

**Power Consumption**
- Max. 400 W

**No. of Temperature Control Unit**
- Max. 6

**Protection Class**
- IP20

**Noise Level under Full-Load**
- 43.1 dBA

**Working environment:**
**Installation Site**
- Indoors only

**Ambient Temperature**
- 2 °C to 40 °C

**Relative Humidity**
- Max. 80% non-condensing for the target temperature

**Working Temperature**
- -2 °C to +99 °C

**Temperature Accuracy**
- 0.1 °C at +25 °C

**Cooling Power of 1 Temperature Control Unit**
- up to 58 W

**Max. Speed of Cooling**
- 12 °C / min with adapter; 22 °C / min without adapter

**Max. Speed of Heating**
- 22 °C / min with adapter; 42 °C / min without adapter

**Cooling Unit**
- **Dimensions (w x d x h)**
  - 505 x 250 x 300 mm³
- **Weight**
  - 9 kg

**Control Unit**
- **Dimensions (w x d x h)**
  - 362 x 240 x 265 mm³
- **Weight**
  - 6.3 kg

**Temperature Control Unit**
- **Dimensions (w x d x h)**
  - 132 x 105 x 31.5 mm³
- **Weight**
  - 0.6 kg

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1 Above 30 °C, cooling speed will be slightly reduced.

2 Equal temperature across the whole surface.