



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

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).

≤43.1 dBA Noise Level



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 well as the cooling unit can be installed externally.

Applications




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

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 ¹
Relative Humidity		Max. 80% non-condensing for the target temperature
Working Temperature		-2 °C up to +99 °C
Temperature Accuracy		0.1 °C at +25 °C ²
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) Weight		505 x 250 x 300 mm ³ 9 kg
Control Unit Dimensions (w x d x h) Weight		362 x 240 x 265 mm ³ 6.3 kg
Temperature Control Unit Dimensions (w x d x h) Weight		132 x 105 x 31.5 mm ³ 0.6 kg

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

² Equal temperature across the whole surface.