

The Grant-bio PCH personal benchtop cooler/heaters are ideal for laboratory applications requiring cooling and heating in microtubes within the temperature range of -10 to +100°C. The PCH cooler/heaters enable a stable temperature to be maintained during room temperature fluctuations.

Two models are available, offering a choice of tube configurations, to meet the needs of many standard laboratory procedures:

PCH-1: 12 x 1.5ml plus 20 x 0.5ml microtubes

PCH-2: 20 x 1.5ml microtubes

The ingenious block construction, combined with the powerful Peltier module, produces very rapid cooling and heating for swift change of application and increased flexibility:

heat up time, RT to 100°C: less than 10 minutes

cool down time, 100°C to RT: less than 12 minutes

cool down time, RT to -10°C: less than 11 minutes

A reaction timer is incorporated for convenience, with an audible alarm to signal time-up. The PCH is easy to use, with independent temperature and time operation, and straightforward setting of the two parameters. The two line LCD status display clearly indicates both set and actual values for temperature and time.

The Peltier effect produces efficient cooling and heating for small thermal loads without the use of a refrigeration system. The dry temperature control system maintains a clean working environment, reducing the chance of contamination or sample dilution. A Peltier system, without the vibration of refrigeration or the turbulence of a waterbath, is also ideal for all incubations where stable conditions are critical.



Applications

Suitable for cooling and heating applications in many different fields, with specific applications including:

- storing frozen restriction enzymes
- nick translations
- ligation reactions
- restriction digests
- protein solubilisation for PAGE
- warm incubation of microcentrifuge tubes for hybridisation
- cooling blood samples prior to coagulation testing
- enzyme reactions and deactivations

The PCH is a very effective tool for DNA sample preparation for denaturing electrophoresis. The exceptionally rapid heat up enables the denaturation temperature of 95°C to be reached swiftly, the timer will signify denaturation time-up, and the samples can be rapidly cooled again ready to load the gels.

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Specification

			PCH-1	PCH-2
temperature range	°C		-10 to 100	-10 to 100
stability	±°C		0.2	0.2
uniformity	@ 10°C	±°C	0.5	0.5
setting resolution	°C		0.1	0.1
heat up rate	RT to 100°C	°C/min	> 10	> 10
cool down rate	100°C to RT	°C/min	> 10	> 10
	RT to -10°C	°C/min	> 2	> 2
capacity	microtubes		12 x 1.5 ml plus 20 x 0.5ml	20 x 1.5ml
overall dimensions	w/d/h	mm	225/195/161	225/195/161
input voltage	V		220-240	220-240
input type			ac (50-60Hz)	ac (50-60Hz)
input current	A		0.5	0.5

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Grant-bio products

- meet the requirements of IEC61010 parts 1 and 2
- bear the CE mark to indicate that they meet the requirements of the Low Voltage and EMC Directives

Repairs are normally carried out within three to five working days of arrival at our factory or receipt of authorisation to repair. Alternatively, spare parts and service manuals can be despatched within two working days. Most overseas distributors offer a rapid and effective after-sales service, with spare parts held in stock.

Grant-bio products are guaranteed for two years against faulty materials and workmanship. For repairs carried out under guarantee, no charge is made for labour or materials.

We are committed to a continuous programme of improvement and specifications may be changed without notice.