

# TG40

Portable Temperature  
Control and  
Screening System for  
Protein Crystallisation



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# TG40

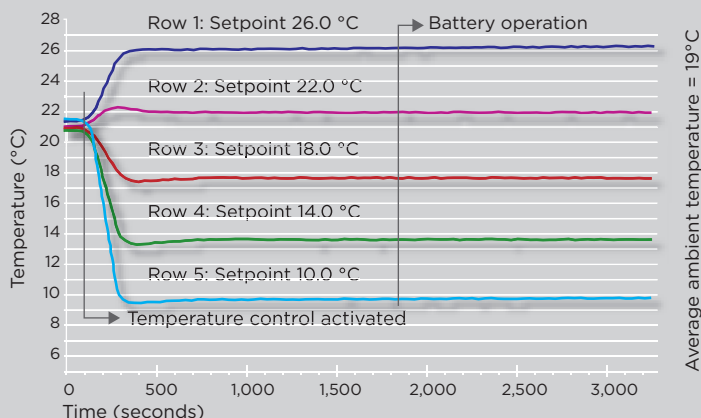
## Product Detail

Centeo's TG40 is a portable, temperature-controlled microplate in SBS format that allows scientists to fully control temperature throughout the entire experimental procedure.

TG40 allows samples to be protected against abrupt temperature changes while being transported around the lab, inspected under a microscope or used with other laboratory equipment such as liquid handling systems.

## Features and Benefits

- TG40 Microplate can accurately control and screen 5 different temperatures simultaneously, i.e. one set temperature per row.
- At 20°C ambient the temperature range is 4°C to 60°C degrees\*.
- Portable operation for more than 30 minutes is possible with a built-in battery.
- Temperature accuracy is 0.5°C\*.
- The plate can be programmed and temperatures recorded through an external PC.



The graph left shows the performance of a TG40 prototype. Initially the microplate is connected to the docking station and running off an external power supply. At 100s the automatic temperature control system is activated, which had previously been programmed to maintain the temperature of rows 1 to 5 at 26.0°C, 22.0°C, 18.0°C, 14.0°C and 10.0°C respectively. At 1850s the plate is disconnected from the external power supply and continues temperature controlled operation using the built-in battery. The switch between power sources has no effect on the accuracy and stability of the temperature control system. TG40 is also able to control temperature accurately even when the set temperature is close to the ambient temperature (i.e. Row 2 and Row 3).

## System Components

- Temperature controlled Microplate.
- Disposable inlays.
- Docking station.
- Graphical user interface.

## Product Specifications\*

Temperature range:	4°C to 60°C* <sup>1</sup> .
Temperature accuracy:	0.5°C.
Well pitch and position:	Standard SBS (96-well).
Portable operation:	Typically 30 minutes* <sup>2</sup> .
Microplate Dimensions:	127.7 mm(L), 85.4 mm(W), 28.0 mm(H).

\* Preliminary

<sup>1</sup> At 20°C ambient temperature.

<sup>2</sup> Battery lifetime dependent on operating conditions. When external power is connected, TG40 will maintain temperature over the lifetime of the plate.



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