

G-STORM™
GS482



PREPARE FOR THE G-STORM™

G-STORM™

GS482

the **GS 482 THERMAL CYCLER** is an ideal solution for scientists looking to maximise their research funds, and invest in a cycliser that offers real flexibility and functionality.

The two independent 48 well blocks, both with sprung heated lids that adapt to both tubes and high profile 48 well plates within the GS482 enables two programs to be run independently or one program simultaneously on both blocks. Either way, the GS482 provides two block functionality at an incredible price point.

Both thermal blocks for the GS482 have 2 independent temperature control sensors and 4 peltier heating units, ensuring that temperature control and uniformity across the block surface is accurate and reproducible time after time, cycle after cycle. With the addition of Active Sample Cooling (ASC) ensuring that samples are cooled until the heated lid reaches its target temperature, therefore reducing non-specific

primer binding and extension, the G-Storm 482 is protecting your samples even before your protocol has begun.

Want gradients? Who wouldn't?! The GS482 has the ability to run gradient programs on both or either thermal blocks as a standard feature. Simply enter a gradient step into your protocol, and the GS482 will generate a gradient over 8 columns. If you want a wider gradient range, then use both blocks!

As part of the G-Storm family of the thermal cyclisers, the GS482 benefits from the same software architecture as the other products in the G-Storm range. The GS482 uses windows CE as its control platform with a 3.5" full colour touch screen.

Users are able to store up to 1000 programs within the onboard software. In addition, users can utilise G-Storm's PC version of the software to generate programs remotely, and then simply transfer via



“The thermal cycler solution for cutting-edge molecular biologists.”

“The GS482 is the perfect thermal cycler solution for your demands – a good looking, multi-function workhorse.”



THE NEW BENCHMARK FOR PROGRAMMING AND CONTROL

Users have the choice to enter known programs manually or utilise the fabulous Program Wizard. The program wizard function and in-built primer algorithms remove the requirement to manually calculate the ideal protocol for your experiment. Simply enter your primer sequences or melting temperatures (T_m's) and let the wizard do the rest! manual programming utilises icon driven commands that enable quick, clear and intuitive protocol inputs. Even utilising G-Storm's gradient function effectively is simple.

In short, the GS482 is the ideal system for labs requiring a solution for low to medium throughput PCR and/or multi-user functionality.

FEATURES

- 2 independent thermal blocks
- Gradient on both or either block
- sprung heated lids
- active sample cooling
- easy to use
- perfect for smaller throughput labs

VISIT OUR WEBSITE AND EXPERIENCE THE ENTIRE G-STORM™ RANGE

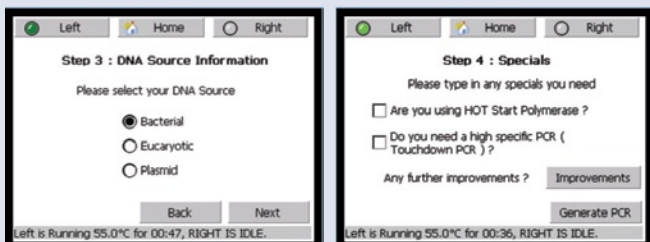
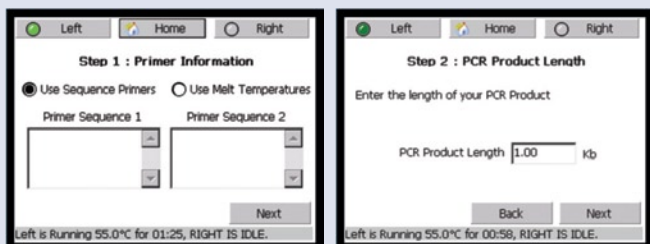
www.gstormdirect.com



GS482's "Home Page" is central to the control of the cycler's various functions. Select the various options, including Wizard, Program and Start on the touch-screen and let the software take you through a logical process that enables you to do what you want to do in easy, simple to follow steps.



The icon driven programming is simplicity itself. Simply select the command that you require and add it to your program and enter your parameters when prompted. This method enables both complex and simple protocols to be entered with steps that include Gradient and Touchdown steps.



The superb "Program Wizard" function uses primer sequences or primer melting temperatures to calculate your protocol for you. By entering this information, product length and any other "special" information, over just five steps, the wizard will present an ideal program based on this information within a few clicks, you are ready to go!

G-STORM™ GS482 TECHNICAL SPECIFICATIONS

Thermal blocks

Block materials	2 x independent 48 well blocks: modular nickel plated anodised aluminium blocks with 4 Peltier heat modules and 2 thermistor sensors per block
Traceability	NIST traceable temperature calibration
Blocks available	2 x 48 well gradient block for 48 x 0.2 ml) tubes or strips (8x6 format)

Thermal block characteristics

Temperature range	4°C-99°C
Temperature control	Calculated mode with plate and tube control algorithms
Volume range	2-150µl
Block accuracy	+/- 0.4°C (20-99°C)
Block homogeneity	+/- 0.4°C
Ramp rate	Up to 3°Cs ⁻¹
Gradient temp range	30°C - 80°C
Max/min gradient span	30°C / 4°C
Sample-overshoot	<1°C
Sensor temperature regulation accuracy	+/- 0.1°C

Heated lids

Lid temperature	2 independent 112°C
Lid pressure	Spring loaded

User interface

Screen type	8.4 inch TFT colour VGA touch-screen (Stylus supplied. Suitable for ball-pen or finger use)
Data input	Touch-screen, external keyboard and mouse (USB) (Optional), barcode scanner (USB) (Optional)
Temperature display	Real-time graphical display of actual block temperatures
Communication	1 x USB
Program storage	Circa 1000 (internal memory)

Power & dimensions

Electronic power	100V to 240V (frequency 48 to 62hz)
Maximum Power Consumption	425 watts
Dimension	291mm (w) x 246mm (h) x 311mm (d)
Weight	14kg
Operating conditions	10°C – 30°C, 0 – 95% relative humidity
Regulatory	CE compliant

Warranties

All G-Storm Ltd thermal cyclers have a two year warranty as standard. Extended warranties are available on request. Please contact G-Storm Ltd or your local distributor for further details

Ordering information

GS00482 G-Storm 482 Thermal Cycler complete system

CONTACT DETAILS

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Your local distributor