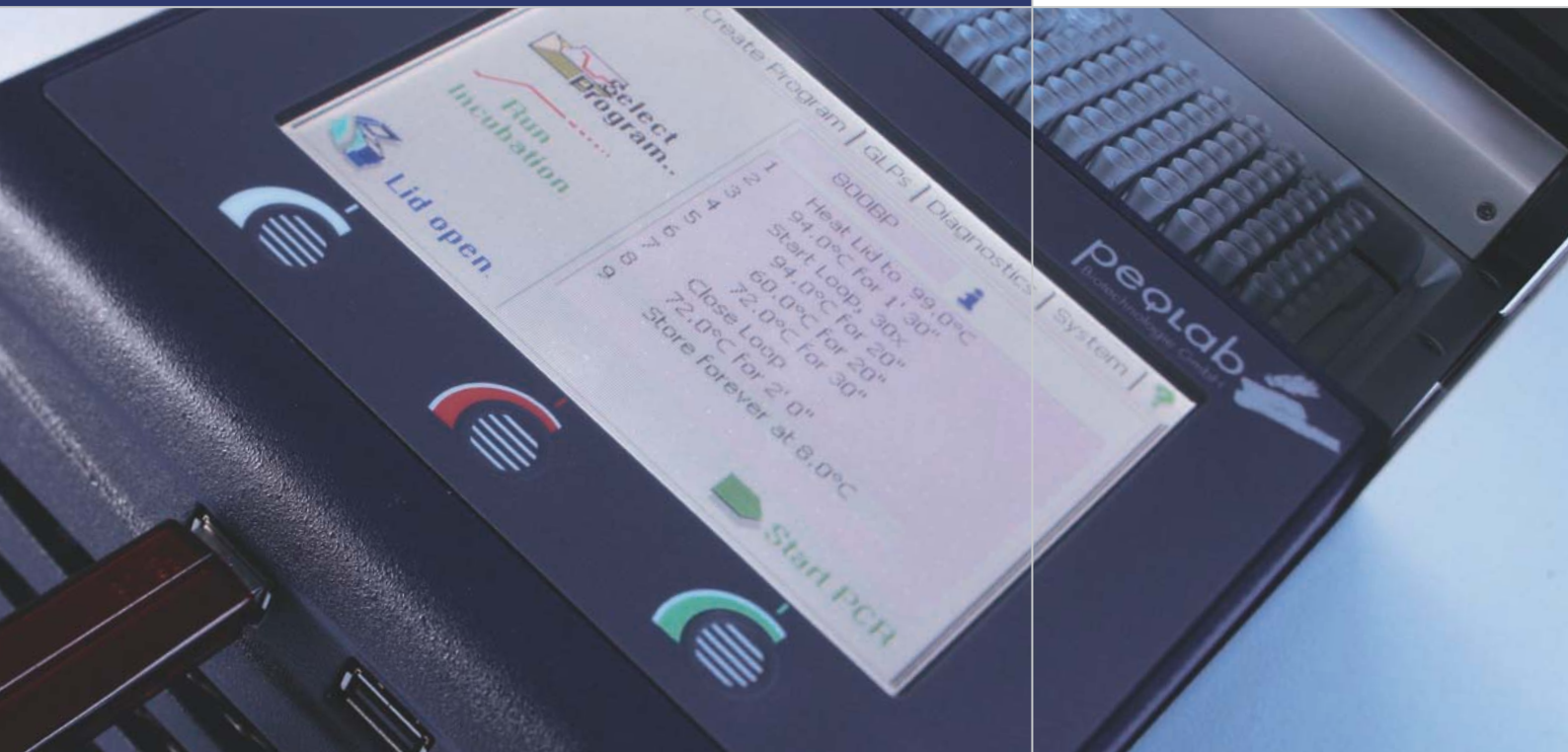


Perfect Cycling



peq**STAR** Thermocycler

Performance

The new peqSTAR thermocycler PCR technology of the 21st century

Excellent PCR results, shortest running times and the simplest operation – all fulfilled by the new peqSTAR thermocycler, the most advanced, high performing cycler yet available. Driven by exceptional German engineering, the peqSTAR is a modern thermocycler, ready to take on the challenges of PCR.

Truly a new STAR for molecular biology.



Space-saving by design and technology

Compact design and an intelligent air-flow control maximizes bench space and enables multiple peqSTAR systems to be sited together.

Quickest running times – greatest life time

Six powerful Peltier elements with Long Life Technology cooled using a revolutionary cooling body, two high durability cooling fans with magnetic bearings and a highly engineered thermoplate enables rapid temperature changes of up to 5 °C/s.

Highest precision – in all areas

Six PT 1000 thermal probes matched with six control circuits provide constant feedback and temperature control of each of the six Peltier elements – assuring the tightest correlation of target and actual temperature across the entire thermoplate.

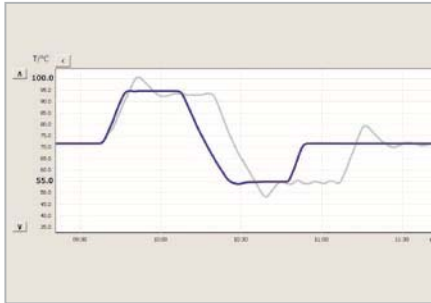
Built in quality and reproducibility – certified

Proudly manufactured in Germany to the highest engineering specifications, certified under ISO 9001 and ISO 13485 quality regulations and accurately calibrated to NIST standards.

Simple to use – powerful to command

An integrated PC enables USB memory stick file sharing, LAN networking, password protected User Administration and a file management system, immediately familiar to users. With a sharp, clear TFT display and intuitive 'press screen' commands, just switch on the peqSTAR and you'll be ready to run.

Ease of use



Fastest ramping without overshoots

The peqSTAR thermocycler exhibits extremely powerful temperature ramping with a possible $+5\text{ }^{\circ}\text{C/s}$ heating and $-5\text{ }^{\circ}\text{C/s}$ cooling but with zero temperature overshoots.

(Figure shows temperature measurement executed using calibrated, external thermal probes.
Blue: peqSTAR 96 Universal
Grey: other leading system)



Constant self-diagnostic temperature display

What is the performance right now of the individual Peltier elements? Not kept as a secret but always on display, through the peqSTAR novel 'Real Time Diagnostic System'.

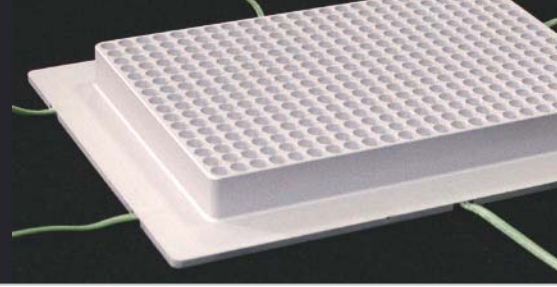
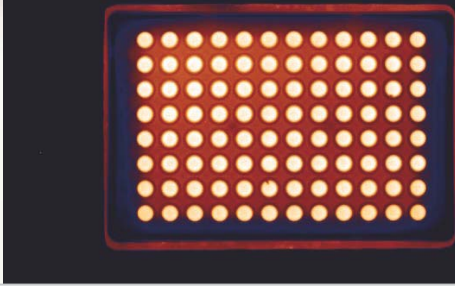


Easily accessible USB ports

Enable quick and easy transfer of PCR protocols using USB memory sticks and system control with a USB mouse.



The peqSTAR comes supplied with the 'peqSTAR Protocol Editor' for creating PCR protocols conveniently on your PC.

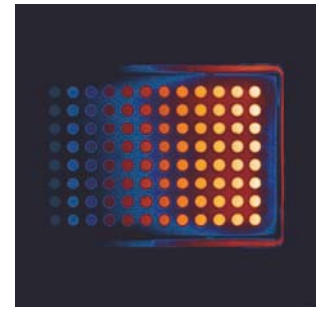


on

The perfect gradient, the perfect control

Six control circuits for the most precise Peltier regulation giving a block temperature of extremely high stability and a temperature gradient of extraordinary linearity.

(Infra-red image by IRCAM GmbH/Erlangen, using IRCAM Velox® 327k SM pro, temperature resolution 12 mK)



Universal block for 0.2 and 0.5 ml tubes

Plate design delivers optimal heat transfer for both 0.2 ml and 0.5 ml tubes.



Results



Ethernet port for LAN networking

enables central protocol management across the network – always the correct protocol on each cyclers.

The combination of high specification engineering and superior system control enables powerful, fast ramping, stable temperature control and a high level of system reliability.



Creating the future together.

Technology

Innovation



Technical Specification

General characteristics

- 6 powerful Peltier elements with Long Life Technology
- 6 control circuits with PT 1000 thermal probes
- Max. heating and cooling rate: 5 °C/s
- Block uniformity (at 72 °C): +/- 0.25 °C
- Temperature range thermoblock: 4 to 105 °C
- Regulating accuracy: +/- 0.1 °C
- Adjustable ramping: 0.1 to 2.0 °C/s
- Increment/decrement time: 0:01 to 9:59 minutes
- Increment/decrement temperature: 0.1 to 9.9 °C
- Temperature range heatable lid: 70 to 120 °C
- Programmable lid locking
- 4 x USB, 1 x Ethernet port (MS Windows®)
- Dimensions (W x H x D): 29 x 31 x 36 cm
- Weight incl. block: 13 kg
- Power consumption: 850 VA
- Power supply: 90 - 260 V AC, 50 - 60 Hz

Gradient feature (optional)

- Maximum gradient over 12 columns: 39.8 °C (+/- 19.9 °C)
- Temperature range, gradient: 35 to 105 °C
- Gradient accuracy: +/- 0.1 °C
- Upgradeability on-the-spot

User Interface/Functions

- Touchsensitive TFT display (1/4 VGA, graphic, 16 colors) control via USB mouse possible
- Internal memory for 1000 typical PCR protocols in unlimited, self-created directories/subfolders
- Unlimited number of programs via network PC or using USB memory sticks
- PC software for convenient creation of PCR programs in the office
- Up to 99 steps per program
- Password protected user accounts with flexible access rights
- Online help
- Calculator for melting temperature and elongation time
- GLP reports for the continuous recording of all runs
- Quick-start function for the last program executed
- Auto-restart after power failure
- Instant incubation mode

Interchangeable block options

- 96 well universal block and heatable lid with automatic height adjustment for 96 x 0.2 ml tubes, 96 well PCR plates or 48 x 0.5 ml tubes having flat caps
- 96 well block and High Pressure Lid (HPL, 100 - 250 N) for the leak-proof closure of 96 well PCR plates
- 384 well block and High Pressure Lid (HPL, 100 - 250 N) for the leak-proof closure of 384 well PCR plates
- *In situ* block with integrated buffer reservoir for up to 4 microscope slides
- HPL variants additionally available with Motor Lid (ML) function. For motorized lid opening/closing in automated systems

Our Service Pledge

- Personal and professional support through our application hotline and local field representatives
- Product demonstrations, installation and on-the-spot instruction
- Rapid delivery times



Ordering Information		
Item	Description	Product Code
peqSTAR 96 Universal	with 96 well universal block and standard lid for 96 x 0.2 ml tubes, 96 well PCR plates or 48 x 0.5 ml tubes with flat caps	95-95002
peqSTAR 96 Universal Gradient	with 96 well universal gradient block and standard lid for 96 x 0.2 ml tubes, 96 well PCR plates or 48 x 0.5 ml tubes with flat caps	95-96002
peqSTAR 96 HPL	with 96 well block and High Pressure Lid for 96 x 0.2 ml tubes or 96 well PCR plates	95-95002-HPL
peqSTAR 96 HPL Gradient	with 96 well gradient block and High Pressure Lid for 96 x 0.2 ml tubes or 96 well PCR plates	95-96002-HPL
peqSTAR 96 ML	with 96 well block and Motor Lid for 96 x 0.2 ml tubes or 96 well PCR plates	95-95002-ML
peqSTAR 96 ML Gradient	with 96 well gradient block and Motor Lid for 96 x 0.2 ml tubes or 96 well PCR plates	95-96002-ML
peqSTAR 384 HPL	with 384 well block and High Pressure Lid for 384 well PCR plates	95-950384-HPL
peqSTAR 384 ML	with 384 well block and Motor Lid for 384 well PCR plates	95-950384-ML
peqSTAR <i>in situ</i>	with <i>in situ</i> block for up to four microscope slides and integrated buffer reservoir	95-950FLAT

Some applications for which this products can be used are protected in certain countries by patent law. Because your purchase does not include the acquisition of licenses for use within the scope of applications protected by patent law, the acquisition of relevant licenses may be necessary depending on the application and on the country of application.

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