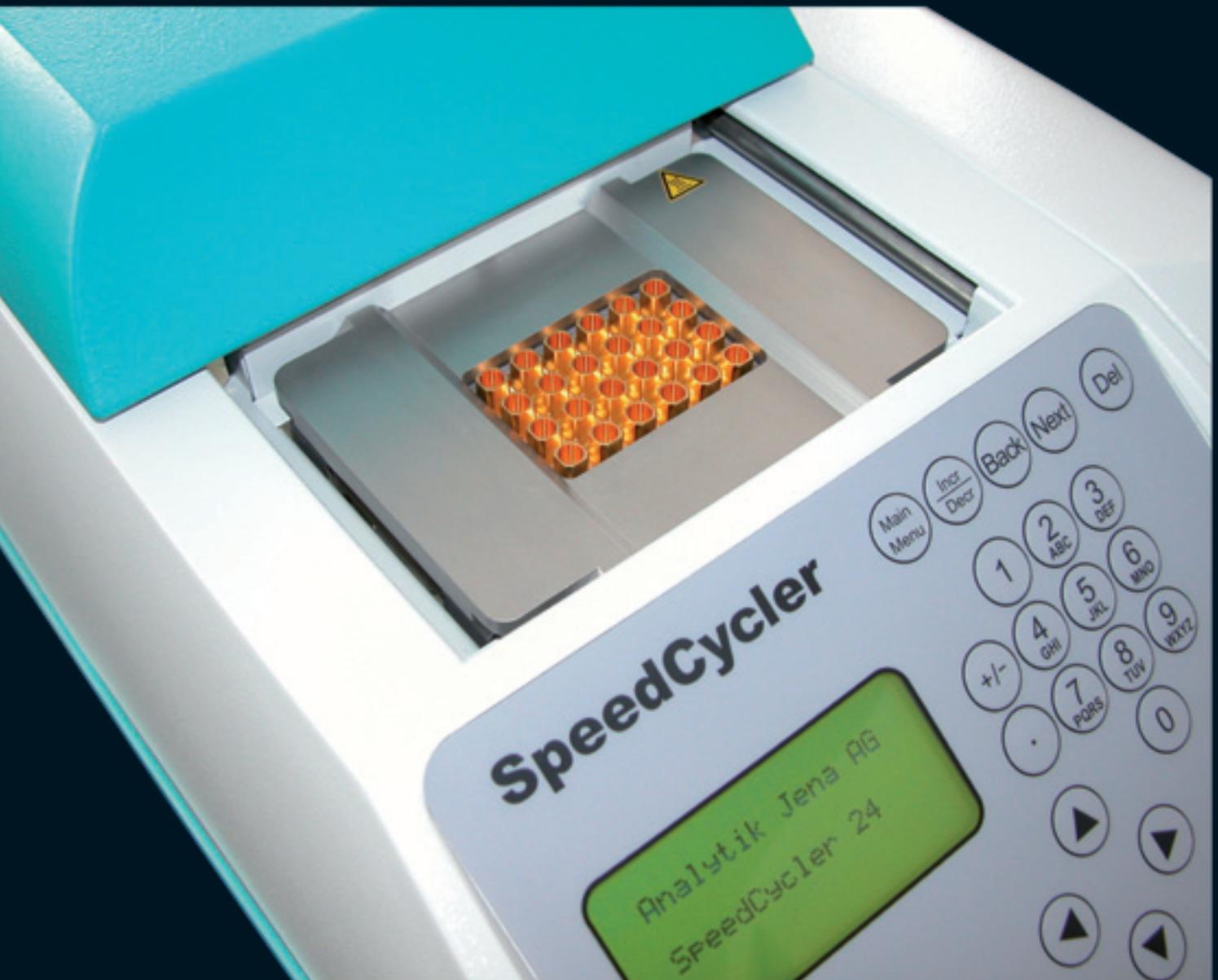


SpeedCycler | Personal24

- The perfect personal cycler for a real rapidPCR
- Fastest system on the market for 0.2 ml tubes
- rapidPCR in less than 14 minutes



SpeedCycler | Personal24

Real rapidPCR in 0.2 ml tubes or strips using the SpeedCycler Personal24

With the new interchangeable block for 24 sample vials, the SpeedCycler now turns into a small personal cyclor. Equipped with the latest generation of Peltier elements the Personal24 provides never achieved heating and cooling speed. Moreover, employing these high-performance Peltier elements completely prevents the occurrence of temperature inaccuracies within the sample blocks of conventional Peltier thermal cyclers and results in outstanding temperature homogeneity throughout the block. Thus the SpeedCycler Personal24 provides precise reaction conditions and enormous short run times.

The SpeedCycler Personal24 offers the additional possibility of using the 96-well rapid block and therefore expands the flexibility of the overall system. This 96-well block enables PCR runs down to 8 minutes and holds the patented ultra-thin 96-well plates or 8-well strips. Both, strips and plates, are optimized for lower sample/chemistry consumption, thus it saves running costs. This flexibility of high-performance blocks outperforms any other thermal cyclor on the market.

The user can do the exchange of these blocks very easily in just a few seconds.

The sample block of the SpeedCycler Personal24 is made of solid sterling silver, which provides excellent thermal conductivity and equilibrates extremely fast. Thus the 24-well block achieves so far unattained heating and cooling rates of 10° C/s and 6° C/s accompanied by excellent temperature uniformity. Unlike other available thermal cyclers these specifications are not unreachable "top values" but parameters a user really can rely on. Coated by a gold layer the valuable silver block is protected against corrosion.

The overall performance of the 24-well block is nearly comparable of that of the SpeedCycler 96. A 793 kb p53 fragment from human genomic DNA can be amplified in less than 14 min. The higher cooling rates also results in a significantly improved specificity of the PCR products compared with standard thermal cyclers. Incidentally the use of costly and often limiting chemical additives is not necessary to perform a rapid PCR amplification.

Advantages at a glance

- Fastest system on the market for 0.2 ml tubes
- Highest speed through heating rates of 10 °C/s and cooling rates of 6 °C/s
- Higher quality results
- Reduced primer mismatching
- More specific amplification products
- Amplification of a 793 kb p53 fragment in just 14 minutes
- Solid silver, gold-coated sample block
- Exceptional temperature homogeneity – no edge effects
- Easiest block exchange in less than 10 seconds

rapidPCR in less than 14 minutes

A three-step "touch and go" PCR protocol with 30 cycles was performed. Parameters: Initial denaturation of 30 sec at 96° C followed by 28 cycles with denaturation of 0 sec at 95° C, annealing of 0 sec at 60° C and elongation of 4 sec at 72° C followed by a final elongation step of 30 sec at 72° C.

The whole sample block was loaded using 0.2 ml thin walled tubes with a sample volume of 25 µl.

Markers are 1500, 850, 400, 200 and 50 bp long.

The absence of edge effects shows the outstanding heating uniformity throughout the sample block.



▲ rapid amplification of a 793 kb p53 fragment from human genomic DNA: outstanding uniformity in less than 14 minutes

Order number

Cat.Nr.	PCR Instrumente
844-00003-2	SpeedCycler Personal24
844-60004-0	24-well block for SpeedCycler 96