



# T3000

Thermocycler

## T3000 Technical Specification / Order information

| Order number                            | 050-720                                                                                                                             | 050-723                                                                      | 050-724                                                                                             |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|                                         | T3000 Thermocycler 20                                                                                                               | T3000 Thermocycler 48                                                        | T3000 Thermocycler combi                                                                            |
| <b>Capacity</b>                         | 3 blocks for 20 x 0.5 ml tubes each                                                                                                 | 3 blocks for 48 x 0.2 ml tubes or 48 well microplates or 6 x 8er strips each | 3 combi blocks for 18 x 0.5 ml tubes or 48 x 0.2 ml tubes, or 48 well microplates or 6 x 8er strips |
| <b>Heating rate*</b>                    | 2.1 °C/sec                                                                                                                          | 2.2 °C/sec                                                                   | 1.4 °C/sec                                                                                          |
| <b>Cooling rate*</b>                    | 1.7 °C/sec                                                                                                                          | 2.0 °C/sec                                                                   | 1.2 °C/sec                                                                                          |
| <b>Temperature uniformity*</b>          | +/- 0.5 °C                                                                                                                          |                                                                              |                                                                                                     |
| <b>Temperature range</b>                | -3 °C to 99.9 °C                                                                                                                    |                                                                              |                                                                                                     |
| <b>Control accuracy</b>                 | 0.1 °C                                                                                                                              |                                                                              |                                                                                                     |
| <b>Blocks</b>                           | Aluminium                                                                                                                           |                                                                              |                                                                                                     |
| <b>Software</b>                         | Program steps are easily entered in a spread sheet<br>Options: time increment, temperature increment, set ramping rate, direct mode |                                                                              |                                                                                                     |
| <b>Program memory</b>                   | 10 individual subdirectories, total capacity of 1.500 program steps                                                                 |                                                                              |                                                                                                     |
| <b>Display</b>                          | High brightness CFL backlight graphical LC Display, viewing area 124 mm x 34 mm, resolution 256 x 64 dots                           |                                                                              |                                                                                                     |
| <b>Auto restart after power failure</b> | Yes                                                                                                                                 |                                                                              |                                                                                                     |
| <b>Cool samples at 4 °C</b>             | Yes                                                                                                                                 |                                                                              |                                                                                                     |
| <b>Smart lid technology</b>             | Yes                                                                                                                                 |                                                                              |                                                                                                     |
| <b>Lid temperature range</b>            |                                                                                                                                     |                                                                              |                                                                                                     |
| <b>Power consumption</b>                | Max. 380 Watt                                                                                                                       |                                                                              |                                                                                                     |
| <b>Noise emission</b>                   | Very low                                                                                                                            |                                                                              |                                                                                                     |
| <b>Interfaces</b>                       | Serial RS232 port                                                                                                                   |                                                                              |                                                                                                     |
| <b>Dimensions (W x D x H)</b>           | 30 cm x 38 cm x 19 cm                                                                                                               |                                                                              |                                                                                                     |
| <b>Weight</b>                           | 11.9 kg                                                                                                                             |                                                                              |                                                                                                     |
| <b>Working conditions</b>               | 5 °C - 35 °C, 70 % relative humidity                                                                                                |                                                                              |                                                                                                     |

\* According to Biometra standard procedure. Technical specifications are subject to change.

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# T3000

## Thermocycler

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# T3000 Thermocycler



## Small, strong and hot!

Like chilli pepper, the new T3000 Thermocycler offers sizzling hot performance in a condensed space.

The T3000 Thermocycler represents the technological upgrade of one of the most successful Thermocyclers in Biometra's history. Utilising the popular triple block concept, the T3000 has been equipped with the latest in Peltier technology to achieve excellent heating and cooling rates. In addition the software has been completely revised for improved ease of use.

High performance on a small footprint combined with unlimited flexibility, this is what makes the new T3000 Thermocycler small, strong and very spicy. Sizzling hot performance in every sense!

### Three independent Thermocyclers in one instrument

The T3000 Thermocycler offers three independent blocks in one housing, thus different protocols can be run at the same time. This makes the T3000 Thermocycler the perfect instrument for laboratories where high flexibility is needed. With a maximum capacity of 3 x 48 wells the T3000 also offers high throughput in parallel operation. The T3000 Thermocycler is available in three different block versions for 0.2 ml tubes, 0.5 ml tubes or both in the combi block.



### Higher speed

The T3000 Thermocycler has been equipped with the latest in Peltier technology. In addition, the heat sink and ventilation system have been completely revised. Thanks to these

improvements the T3000 achieves faster heating and cooling performance. High ramping rates provide both short experimental times and increased specificity.



### Smart lid technology

Like all Biometra Thermocyclers the T3000 provides heated lids with automatic pressure control. The temperature can be set for each lid individually between . The unique design ensures the tubes are not damaged in any way by allowing the heated lid to be lowered until the optimum pressure is achieved. This enables close contact between lid and tubes, and reliably prevents excessive pressure.



## T3000 Thermocycler features

- Three independent Thermocyclers in one housing
- Runs three different programs at same time
- High parallel throughput with a maximum of 144 samples
- Three different block formats available: 20 well, 48 well, combi block
- Intuitive programming
- Context sensitive soft keys
- Three heated lids with automatic pressure control (Smart Lid Technology)
- Program storage in individual subdirectories

|    |          |
|----|----------|
| 1: | PROGRAM1 |
| 2: | PROGRAM2 |
| 3: | PROGRAM3 |
| 4: | empty    |
| 5: | empty    |

### Easy programming

The T3000 Thermocycler offers intuitive programming and a new memory structure. New programs are easily created using the spread sheet layout that shows all important parameters on one screen. Four softkeys directly below the display offer quick access to all functions needed in the individual context. For easy retrieval, programs can be stored in individual subdirectories. Software options include both incremental and decremental temperature and time, automatic restart after power failure and extended incubation at sub-ambient temperatures.

