

Biometra®

Performance Simplicity Elegancy

The **new**
Biometra Thermocycler



Biometra®



Innovation · Advancement · Development

TProfessional Thermocycler

The Biometra **TProfessional Thermocycler** is inspired by the wish to simplify molecular biology research. To reach this goal the instrument housing, lid and block were totally redesigned, providing so far unrealised speed and temperature uniformity. Innovative user software was developed, driven by Biometras' 15-years experience in interface design. The result is an easy to use Thermocycler with excellent technical specifications.

❖ TProfessional Thermoblock

The **TProfessional Thermocycler** offers three different block modules.

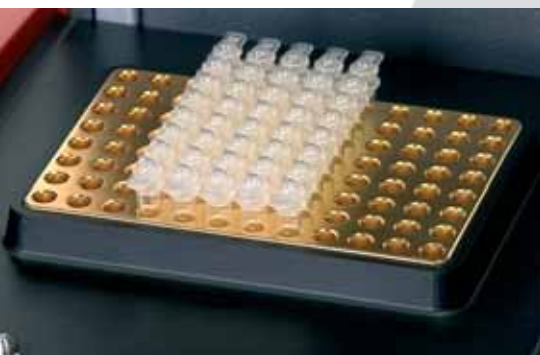
To achieve ultimate performance the 96 well modules are made of silver. Due to its excellent heat conductivity silver equilibrates extremely quickly, thus providing maximum speed and temperature uniformity. To protect the valuable silver blocks against corrosion, the block surfaces are covered with a thin gold layer.

The 96 well silver block is designed for daily routine work and can be used with 0.2 ml tubes, strips or microplates. For rapid optimisation of new protocols a 96 well Gradient version is available. The third block module is designed for use with 384 well plates. All block modules can be easily exchanged in less than 10 seconds.



❖ TProfessional Lid

The **TProfessional Lid** has been optimised to achieve two essential requirements: prevention of condensation and reliable contact between samples and thermoblock. The lid is powered by Biometras well know smart lid technology which automatically limits lid pressure to save tubes from damage. In addition, the new design of the High Performance Lid ensures an even temperature distribution between samples thus significantly improving temperature uniformity. With one press on the front button, the lid gently swings open and arrests in its end position.





TPProfessional User Interface

The TProfessional User Interface incorporates Biometras proven spreadsheet programming philosophy. Avoiding endless serial program windows, all steps of a program are entered in a single screen. This makes the creation of new or editing existing programs fast and easy. One touch leads from the spreadsheet to an alternative graphical programming mode. The TProfessional manages up to 30 individual users (all password protected) and provides for a large program store.

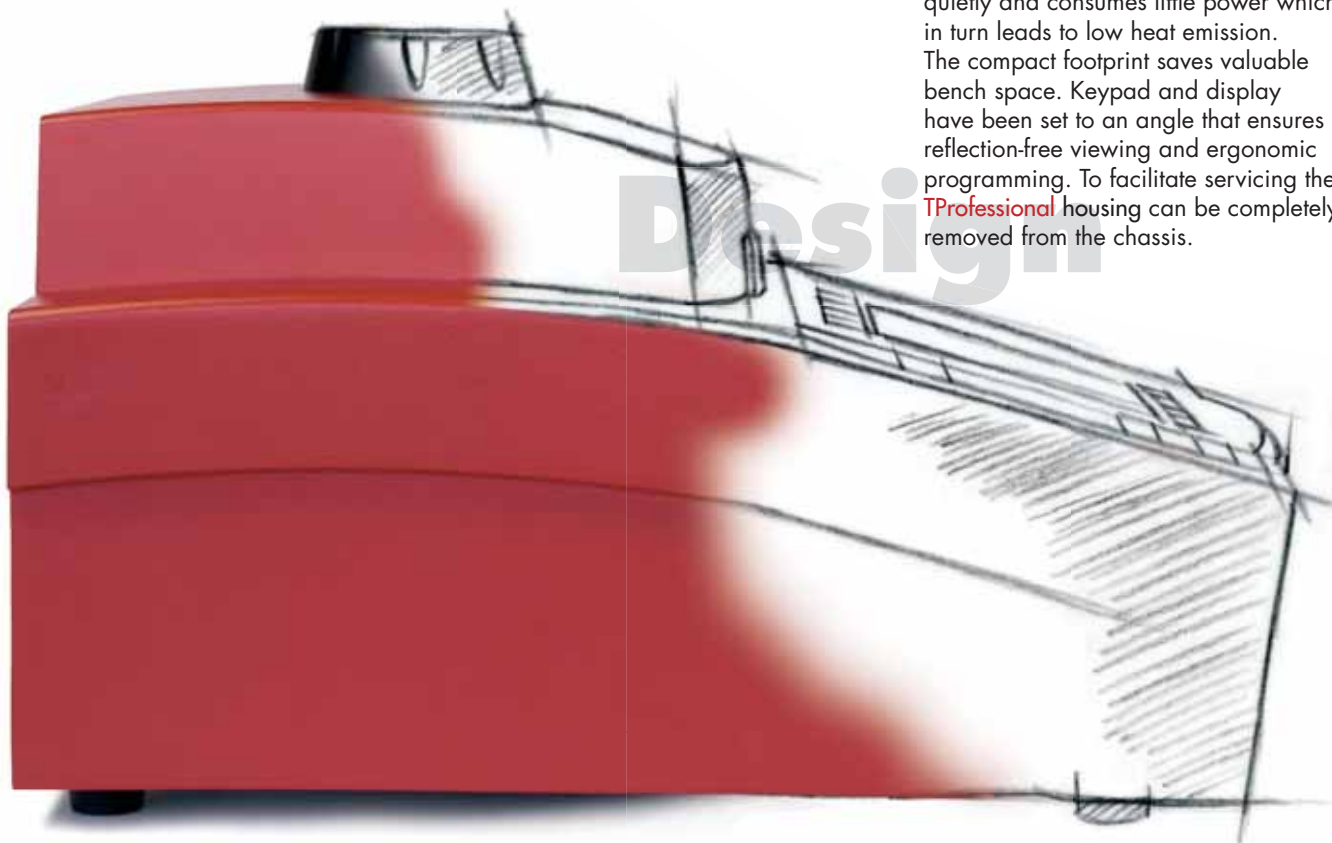
Features	
➤	Gold plated silver block
➤	Three different block types
➤	Straight forward programming
➤	Excellent temperature uniformity
➤	High speed performance
➤	Block exchange in less than 10 seconds
➤	Smart high performance lid
➤	Excellent temperature precision
➤	Push button opening (Lid arrests in end position)
➤	Robust lid construction (no sliding parts)
➤	Large graphical screen
➤	Complete temperature protocol in one window
➤	Spreadsheet or graphical programming
➤	Displays the last 5 programs for quick start
➤	Compact footprint
➤	Silent operation
➤	Energy efficient
➤	Intelligent air stream design
➤	Automatic block recognition
➤	Robust and elegant construction
➤	Easy to view screen

User Interface

TPProfessional Design

The elegant TProfessional housing is designed for heavy use. Due to an optimised air stream design even higher efficiency and better temperature uniformity is achieved. The instrument works quietly and consumes little power which in turn leads to low heat emission. The compact footprint saves valuable bench space. Keypad and display have been set to an angle that ensures reflection-free viewing and ergonomic programming. To facilitate servicing the TProfessional housing can be completely removed from the chassis.

Design



	TProfessional 96	TProfessional 96 Gradient	TProfessional 384
Order number	070-901	070-801	070-902
Capacity	96 tubes 0.2 ml, 96 well microplates	96 tubes 0.2 ml, 96 well microplates	384 well microplates
Block	Silver	Silver	Aluminum
Block coating	Gold	Gold	Special Alloy
Block exchange	Quick-X-change	Quick-X-change	Quick-X-change
Block exchange time	less than 10 sec	less than 10 sec	less than 10 sec
Max. heating*	5.0 °C/sec	5.0 °C/sec	1.5 °C/sec
Max. cooling*	3.5 °C/sec	3.5 °C/sec	1.0 °C/sec
Gradient	-	40 °C	-
Temperature uniformity	95 °C: +/- 0.40 °C within 15 sec 70 °C: +/- 0.25 °C within 15 sec 55 °C: +/- 0.15 °C within 15 sec		+/- 0.6 °C +/- 0.4 °C +/- 0.3 °C
Temperature range	-3 °C to 99 °C		
Control accuracy	+/- 0.1 °C		
Software	Quickstart of the last five programs, program preview prior to start, toggle between spreadsheet and graphical mode, gradient temperature graph, adjustable ramp rates, extended self test, service files, automatic block recognition, PC control, time and temperature in- or decrements		
Programming mode	Spreadsheet or graphical		
Programm memory	Total capacity of 250 programs in 30 user directories (password protected)		
Display	¼ VGA screen, 320 x 240 pixel		
Auto restart after power failure	Yes		
Cool samples to 4 °C	Yes		
Lid technology	High Performance Smart Lid (HPSL)		
Lid temperature range	30 to 99 °C		
Power consumption	max. 480 Watt		
Power supply	100, 115, 230 Volt/50-60 Hz		
Noise emission	Very low		
Interfaces	RS232 serial port		
Dimensions (W x D x H)	28 cm x 38 cm x 24 cm		
Weigth	13.0 kg		

Block modules

Order number	Description
070-911	TProfessional 96 well module
070-811	TProfessional 96 Gradient module
070-912	TProfessional 384 well module

*Measured inside the block.

Technical specifications are subject to change.

Biometra®

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