

# Thermal Cycler Designed for Integration in Robotic Systems

## Biometra TRobot

### Features

- Designed specifically for robotic systems
- Integrated cyler with external controller
- Motorized heated lid
- Unique motorized plate lifter
- Small footprint



TRobot with automatically opening lid

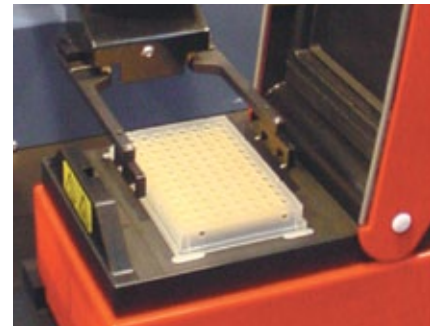


Plate removal with a robot gripper

### Optimized for integration in robotic systems

The Biometra TRobot thermal cycler is specifically designed for integration in robotic systems. Due to its minimum footprint the thermal cycler ideally fits robotic platforms where space usually is limited. The Biometra TRobot is equipped with a motorized plate lifter which allows the removal of plates by a robotic arm.

### Unique: Motorized plate lifter

Removing plates after thermocycling is one of the major challenges in automation. With conventional thermal cycler systems, the plates often stick to the thermoblock after thermocycling. Consequently, they cannot be removed by a robotic arm and the whole system halts.

To overcome this issue the Biometra TRobot has been equipped with a

patented motorized plate lifter. This lifter elevates the plate from the block as the lid opens. Once lifted, the plate can be easily removed by the robotic arm.

### Two different block models

The Biometra TRobot is available in two different block versions: for 96 well and 384 well plates. Taking advantage of the high thermal conductivity of silver the Biometra TRobot 96 achieves high ramping rates as well as excellent temperature uniformity. The Biometra TRobot 384 offers perfect fit for 384 well plates. The 384 well block is coated with a special alloy to facilitate plate removal by a robotic arm.

### Features

- Available with 96 well (silver) or 384 well (aluminum) block
- Low power consumption
- Communication with PC via serial RS232 protocol
- Instrument provides extensive status report

### Software integration

In a robotic environment the Biometra TRobot is controlled by the computer of the robot. Integration of the Biometra Thermocycler Manager software allows quick access to all thermocycler functions. Alternatively, the Biometra TRobot control can be directly implemented into the control software of the robotic system. For this purpose a comprehensive description of the serial communication commands is available.

### Technical data

Model	Biometra TRobot 96	Biometra TRobot 384
Sample capacity	96 well microplate	348 well microplate
Block	Silver block, gold-plated	Aluminum block, special alloy
Max. heating rate	3.5 °C/s	1.0 °C/s
Max. cooling rate	2.5 °C/s	1.0 °C/s
Thermal cycler dimensions		
Footprint (W x L)	168 mm x 226 mm	
Height (lid closed)	195 mm	
Height (lid open)	306 mm	

### Order information

Order number	Biometra TRobot 96	Biometra TRobot 384
	846-050-991	846-050-992

For more details please check out [www.analytik-jena.com](http://www.analytik-jena.com).

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Subjects to changes in design and scope of delivery as well as further technical development!