

# TS-100, Thermo-Shaker for microtubes and PCR plates

## DESCRIPTION

Thermo-Shaker TS-100 provides intensive mixing and temperature control of samples in microtest tubes or PCR plate. Functions of heating (up to +100°C) and mixing can be performed both simultaneously and independently, i.e. the unit implements three devices in one:

1. Shaker;
2. Dry-block Thermostat;
3. Thermo-Shaker.

TS-100 is used for DNA analysis sample preparation, for extraction of proteins, polysaccharides, lipids and other cellular components. Features of TS-100 meet the increased requirements of the user, including:

- Quickly reaches the set mixing speed and maintains same amplitude of rotation around the block;
- Stable maintenance of the temperature of a wide range over the entire surface of the block;
- LCD display shows the set and actual temperature, speed and time;
- Quiet engine operation, compact size, long service life.

Heating source is a printed heating board (12 V). Mixing is provided by movement of orbital type.

The instrument is applicable in:

- Genetic analysis — in extraction of DNA, RNA and further sample preparation;
- Biochemical study of enzymatic reactions and processes;
- Extraction of metabolites from cellular material.

### Temperature Calibration Function

With the help of the temperature calibration function the user can calibrate the unit approx.  $\pm 6\%$  of the selected temperature to compensate differences in the thermal behaviour of tubes from different manufacturers.



## CAT. NUMBER

Without thermoblock	Without thermoblock
BS-010120-AAI	230VAC 50/60Hz Euro plug
BS-010120-AAQ	230VAC 50/60Hz UK plug
BS-010120-AA4	230VAC 50/60Hz AU plug
BS-010120-AAJ	100VAC 50/60Hz US plug, 120VAC 60Hz US plug
BS-010120-HK	IQ OQ document
BS-010120-IK	PQ document

## SPECIFICATIONS

Temperature setting range	+25°C ... +100°C
Temperature control range	5°C above ambient ... +100°C
Temperature setting resolution	0.1°C
Temperature stability	±0.1°C
Temperature accuracy at +37°C	±0.5°C
Average heating speed from +25°C to +100°C	4°C/min
Temperature uniformity over the block at +37°C	±0.1°C
Temperature uniformity over the block at +100°C	±0.2°C
Temperature calibration coefficient range	0.936...1.063 (± 0.063)
Speed control range	250–1400 rpm
Digital time setting	1 min–96 hrs (1 min increment)
Timer sound signal	+
Orbit	2 mm
Display	LCD, 16 x 2 signs
Microprocessor controlled temperature, mixing speed and operation time	+
Maximum continuous operation time	168 h
Overall dimensions (W×D×H)	220x240x90 mm
Weight	3.7 kg
Input current/power consumption	12 V, 3.5 A / 42 W
External power supply	Input AC 100–240 V; 50/60 Hz; Output DC 12 V

## ACCESSORIES



SC-18  
BS-010120-AK  
block

20 × 0.5 ml + 12 × 1.5 ml  
microtubes



SC-18/02  
BS-010120-CK  
block

20 × 0.2 ml microtubes + 12 ×  
1.5 ml microtubes



SC-24N  
BS-010120-GK  
block

24 x 1.5 ml microtubes



SC-24  
BS-010120-EK  
block

24 × 2 ml microtubes



SC-96A  
BS-010120-FK  
block

96-well unskirted or semi-  
skirted microplate (0.2 ml) for  
PCR