

www.enrico-hruno.it

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 $^{\circ}\text{C}$ to +100 $^{\circ}\text{C}$	4°C/min
Temperature uniformity over the block at +37 $^{\circ}\text{C}$	±0.1°C
Temperature uniformity over the block at +100 $^{\circ}\text{C}$	±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 / non–stop (increment 1 min)
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

 $20 \times 0.5 \text{ ml} + 12 \times 1.5 \text{ ml}$ microtubes



SC-18/02 BS-010120-CK block

20 \times 0.2 ml microtubes + 12 \times 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 semiskirted microplate (0.2 ml) for PCR or $12 \times 8 - 0.2$ ml strips or 96 tubes of 0.2 ml.