



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



### DESCRIPTION

Thermo–Shaker **TS-100C** provides intensive mixing and temperature control of samples in microtest tubes or PCR plate. This model of Thermo–Shaker differs from TS-100 with a possibility of cooling samples down to +4°C. Features of **TS-100C** meet the highest expectations of users according to many parameters:

- Fast reaching of specified mixing speed and maintenance of equal amplitude of rotation throughout the Thermo–Shaker block;
- 2. Stability of maintaining the preset temperature in a wide range throughout the Thermo–Shaker's block surface:
- 3. LCD display indicates preset and current values of temperature, speed and time of operation;
- 4. Quiet motor operation, compact size, prolonged service life.

Functions of heating and mixing can be performed both simultaneously and independently.

There are five heating and cooling blocks available, including a block with a plastic lid for the PCR-plates. All blocks are mutually interchangeable and can be easily installed on Thermo—Shaker.

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. ±6% of the selected temperature to compensate differences in the thermal behaviour of tubes from different manufacturers.



#### CAT. NUMBER

Without thermoblock	Without thermoblock
BS-010143-AAI	230VAC 50/60Hz Euro plug
BS-010143-AAQ	230VAC 50/60Hz UK plug
BS-010143-AA4	230VAC 50/60Hz AU plug
BS-010143-AAJ	100VAC 50/60Hz US plug, 120VAC 60Hz US plug
BS-010143-HK	IQ OQ document
BS-010143-IK	PQ document

## SPECIFICATIONS

Temperature setting range	+4°C +100°C
Temperature control range	15°C below 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	5°C/min
Average cooling speed from +100°C to +25°C	5°C/min
Average cooling speed from +25°C to +4°C	1.8°C/min
Temperature uniformity over the block at +4°C	±0.6°C
Temperature uniformity over the block at +37°C	±0.1°C
Temperature uniformity over the block at +100°C	±0.3°C
Temperature calibration coefficient range	0.9361.063 (± 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, 4.9 A / 60 W
External power supply	Input AC 100–240 V; 50/60 Hz; Output DC 12 V

### ACCESSORIES



SC-18C BS-010143-AK block

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



SC-18/02C BS-010143-CK block

 $20 \times 0.2$  ml microtubes +  $12 \times 1.5$  ml microtubes



SC-24NC BS-010143-GK block

24 x 1.5 ml microtubes



SC-24C BS-010143-EK block

24 × 2 ml microtubes



SC-96AC BS-010143-FK block

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



**VP-8/5C** BS-010176-SK block

8 × 5 ml conical tubes



VP-4C BS-010176-GK block

 $4 \times 50$  ml conical tubes



**VP-8/15C** BS-010176-HK block

8 × 15 ml conical tubes



**VP-32C**BS-010176-JK
block

32 × 0.5 ml microtubes



VP-CV-20C BS-010176-IK block

20 × 10mm cuvettes



VP-CL-24C BS-010176-KK block

 $24 \times 3.6 - 4.5$  ml cryotubes



VP-CS-24C BS-010176-LK block

 $24 \times 1 - 1.8$  ml cryotubes



VP-20C BS-010176-TK block

 $20 \times \text{ø}12 \text{ mm}$  round bottom tubes