

## TS-100 and TS-100C, Thermo-Shakers

**TS-100** and **TS-100C** thermo-shakers are designed for intensive mixing of samples in microtest tubes or PCR plates in a temperature control environment. The TS-100C model of thermo-shaker differs from TS-100 in the possibility of cooling samples down to  $+4^{\circ}$ C.

Features of thermo-shakers 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;
- Stability of maintaining the set temperature in a wide range throughout the block surface of thermo-shakers;
- With the help of the temperature calibration function, the user can calibrate the unit approximately  $\pm 6\%$  of the selected temperature to compensate differences in the thermal behaviour of tubes from different manufacturers;
- LCD display indicates pre-set and current values of temperature, speed and time of operation;
- Quiet motor operation, compact size, prolonged service life.

Functions of heating and mixing can be performed either simultaneously or independently, that allows using the unit as three independent devices:

- · Thermostat:
- · Shaker;
- · Thermo-shaker.

We offer five heating and cooling blocks for each model, including a block with a plastic lid for PCR-plates. Within one model of thermo-shaker, the blocks are mutually interchangeable and can be easily installed.

The devices are applicable in:

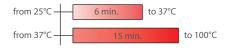
#### THE DEVICES ARE APPLICABLE IN:

- Genetic analyses in extraction of DNA, RNA and further sample preparation;
- Biochemistry for studying of enzymatic reactions and processes;
- Cellular biology extraction of metabolites from cellular material.

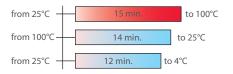




#### HEAT UP TIMES FOR TS-100



#### HEAT UP AND COOL DOWN TIMES FOR TS-100C





# TS-100 and TS-100C, Thermoshakers

	TS-	-100	TS-100C				
Temperature setting range	+25°C +100°C		+4°C +100°C				
Temperature control range	5°C above ambient +100°C 15°C below ambient +10		+100°C				
Temperature setting resolution	0.1℃						
Temperature stability	±0.1°C						
Temperature accuracy @ +37°C	±0.5℃						
Average heating speed:	4°C/min from +25°C to +100°C		5°C/min from +25°C to +100°C				
Average cooling speed:	_		from +100°C to +25°C from +25°C to +4°C	5°C/min 1.8°C/min			
Temperature uniformity over the block:	@ +37°C @ +60°C @ +100°C	±0.1°C ±0.2°C ±0.2°C	@ +4°C @ +37°C @ +100°C	±0.6°C ±0.1°C ±0.3°C			
Temperature calibration coefficient range	0.936 - 1.063 (±0.063)						
Speed control range	250–1400 rpm						
Acceleration time.	3 sec						
Orbit	2 mm						
Display	LCD, 2×16 signs						
Microprocessor controlled temperature, mixing speed and operation time							
Digital time setting	1 min. – 96 hrs. (1 min increment)						
Maximum continuous operation time	96 hours						
Overall dimensions (W $\times$ D $\times$ H)	205×230×130 mm						
Weight	3.2 kg		4.2 kg				
Input current/power consumption	12 V, 3.5 A/42 W 12 V, 4.9 A/60 W						
External power supply	Input AC 100–240 V, 50/60 Hz; Output DC 12 V						

**ORDERING INFORMATION:** 

Cat. number

TS-100 without block

BS-010120-AAI

TS-100C without block

BS-010143-AAI



Mixing Efficiency Video is available on the website



Product video is available on the website











### **Interchangeable Blocks for TS-100**

Optional Blocks:		Tube's volume	Cat. number
1 SC-18	20 and 12 microtubes	0.5 ml and 1.5 ml	BS-010120-AK
2 SC-18/02	20 and 12 microtubes	0.2 ml and 1.5 ml	BS-010120-CK
<b>3</b> SC-24	24 microtubes	2 ml	BS-010120-EK
4 SC-24N	24 microtubes	1.5 ml	BS-010120-GK
<b>5</b> SC-96A	96-well microplate (0.2 ml) for PCR		BS-010120-FK



## Interchangeable Blocks for TS-100C

Optional Blocks:		Tube's volume	Cat. number
		Tube's volume	Cat. Hullibel
1 SC-18C	20 and 12 microtubes	0.5 ml and 1.5 ml	BS-010143-AK
2 SC-18/02C	20 and 12 microtubes	0.2 ml and 1.5 ml	BS-010143-CK
<b>3</b> SC-24C	24 microtubes	2 ml	BS-010143-EK
4 SC-24NC	24 microtubes	1.5 ml	BS-010143-GK
SC-96AC	96-well microplate (0.2 ml) for PCR		BS-010143-FK

