

TS-100, TS-100C, and TS-100C Smart Thermo-Shakers ANNOUNCEMENT

DESCRIPTION

New upgraded versions of **TS-100**, **TS-100C** and **TS-100C Smart** thermo-shakers are designed for intensive mixing of various reactions vessels in a temperature-controlled environment. The **TS-100C** model of thermo-shaker differs from **TS-100** in the possibility of cooling samples down to +4°C. The **TS-100C Smart** allows for PC communication via USB and software. New upgraded versions introduce 12 new platforms, platform-fit racks for sample handling, individual temperature calibration for each platform and automatic temperature calibration adjustment via platform detection system, as well as, other features that meet the highest expectations of users according to following 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 sur-face 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 behavior 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;
- Sensor error handling and diagnostics;

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 17 heating and cooling blocks for each model. The new 12 platforms are compatible only with the new versions of the thermo-shakers. Within one model of thermo-shaker, the blocks are mutually inter-changeable and can be easily installed.

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.



Premium Product Class

Ø 2 mm
orbit

TS-100



TS-100
product video

Premium Product Class

Ø 2 mm
orbit

TS-100C



TS-100C
product video

Smart Plus Product Class

Ø 2 mm
orbit

TS-100C Smart



Bluetooth®
connection

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

SPECIFICATIONS

	TS-100	TS-100C, TS-100C Smart
Temperature setting range	+25°C ... +100°C	+4°C ... +100°C
Temperature control range	5°C above ambient ... +100°C	15°C below ambient ... +100°C
Temperature setting resolution		0.1°C
Temperature stability @ +37°C		±0.1°C
Temperature accuracy @ +37°C		±0.3°C
Calibration option		yes
Temperature calibration coefficient range		0.85...1.15
Speed control range		250–1500 rpm
Speed setting resolution		10 rpm
Orbit		2 mm
Display		LCD, 2 × 16 signs
Digital time setting		1 min–96 h (1 min increment)
Timer sound signal		yes
Overall dimensions with thermoblock (WxDxH)		220 × 240 × 130 mm
Weight		3.7 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	
PC software	—	only for TS-100C Smart



ORDERING INFORMATION:

Cat. number 

TS-100 without block

BS-010120-AAI

TS-100C without block

BS-010143-AAI

TS-100C Smart with software, without block

BS-010171-A01

Photos and descriptions of all blocks can be found on next page

Interchangeable Blocks for TS-100

ORDERING INFORMATION

Cat. number

Optional Blocks:	Description	Maximal RPM	Maximal temperature	
1 SC-8/5	8 × 5 ml falcon tubes	1200	100	BS-010120-NK
2 SC-4	4 × 50 ml falcon tubes	1000	80	BS-010120-OK
3 SC-8/15	8 × 15 ml falcon tubes	1100	80	BS-010120-PK
4 SC-CU-24	24 × 0.2–4.5 ml cuvettes	1100	80	BS-010120-QK
5 SC-32	32 × 0.5 ml microtubes	1400	100	BS-010120-RK
6 SC-CRL-24	24 × 3.6–4.5 ml cryotubes	1300	100	BS-010120-SK
7 SC-CRS-24	24 × 1–1.8 ml cryotubes	1400	100	BS-010120-TK
SC-20	20 × Ø12 mm reaction tubes	*	*	BS-010120-UK
SC-MP-96	96 × 0.4 ml microplates	*	*	BS-010120-VK
SC-384	384 × 0.04 ml PCR plates	*	*	BS-010120-WK
SC-DW-384	384 × 0.02–0.04 ml DWP plates	*	*	BS-010120-XK
SC-DW-96/05	96 × ≤0.5 ml DWP plates	*	*	BS-010120-YK
8 SC-18	20 × 0.5 ml + 12 × 1.5 ml microtubes	1400	100	BS-010120-AK
9 SC-18/02	20 × 0.2 ml microtubes + 12 × 1.5 ml microtubes	1400	100	BS-010120-CK
10 SC-24N	24 × 1.5 ml microtubes	1400	100	BS-010120-GK
11 SC-24	24 × 2 ml microtubes	1400	100	BS-010120-EK
12 SC-96A	96-well unskirted or semi-skirted microplate (0.2 ml) for PCR or 12 × 8–0.2ml strips or 96 tubes of 0.2 ml	1400	100	BS-010120-FK

* — To be announced



1 SC-8/5



2 SC-4



3 SC-8/15



4 SC-CU-24



5 SC-32



6 SC-CRL-24



7 SC-CRS-24



8 SC-18



9 SC-18/02



10 SC-24N



11 SC-24



12 SC-96A



A SC-RK-24N



Optional Racks:	Description	Cat. number
A SC-RK-24N	Microtube rack for SC-24N, SC-24NC	BS-010120-MK
B SC-RK-32	Microtube rack for SC-32, SC-32C	BS-010120-ZK
C SC-RK-24	Microtube rack for SC-24, SC-24C	BS-010143-XK

Interchangeable Blocks for TS-100C and TS-100C Smart

ORDERING INFORMATION

Cat. number



Optional Blocks:	Description	Maximal RPM	Maximal temperature	
1 SC-8/5C	8 × 5 ml falcon tubes	1200	100	BS-010143-LK
2 SC-4C	4 × 50 ml falcon tubes	1000	80	BS-010143-MK
3 SC-8/15C	8 × 15 ml falcon tubes	1100	80	BS-010143-NK
4 SC-CU-24C	24 × 0.2–4.5 ml cuvettes	1100	80	BS-010143-OK
5 SC-32C	32 × 0.5 ml microtubes	1400	100	BS-010143-PK
6 SC-CRL-24C	24 × 3.6–4.5 ml cryotubes	1300	100	BS-010143-QK
7 SC-CRS-24C	24 × 1–1.8 ml cryotubes	1400	100	BS-010143-RK
SC-20C	20 × ø12 mm reaction tubes	*	*	BS-010143-SK
SC-MP-96C	96 × 0.4 ml microplates	*	*	BS-010143-TK
SC-384C	384 × 0.04 ml PCR plates	*	*	BS-010143-UK
SC-DW-384C	384 × 0.02–0.04 ml DWP plates	*	*	BS-010143-VK
SC-DW-96/05C	96 × ≤0.5 ml DWP plates	*	*	BS-010143-WK
8 SC-18C	20 × 0.5 ml + 12 × 1.5 ml microtubes	1400	100	BS-010143-AK
9 SC-18/02C	20 × 0.2 ml microtubes + 12 × 1.5 ml microtubes	1400	100	BS-010143-CK
10 SC-24NC	24 × 1.5 ml microtubes	1400	100	BS-010143-GK
11 SC-24C	24 × 2 ml microtubes	1400	100	BS-010143-EK
12 SC-96AC	96-well unskirted or semi-skirted microplate (0.2 ml) for PCR or 12 × 8–0.2ml strips or 96 tubes of 0.2 ml	1400	100	BS-010143-FK

* — To be announced


1 SC-8/5C

2 SC-4C

3 SC-8/15C

4 SC-CU-24C

5 SC-32C

6 SC-CRL-24C

7 SC-CRS-24C

8 SC-18C

9 SC-18/02C

10 SC-24NC

11 SC-24C

12 SC-96AC

A SC-RK-24N


Optional Racks:

Description

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