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

Smart Plus Product Class

DESCRIPTION

Thermo–Shaker **TS-100C Smart** 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 and with control up to 7 units from PC via Bluetooth® technology. Features of **TS-100C Smart** meet the highest expectations of users according to many parameters:

1. 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.

TS-100C Smart software features

- Rotation speed
- Temperature
- Time
- Sound signal
- Creating Profiling programs using controlled parameters
- Visualization of temperature vs time and speed vs time graphs
- Data export to Excel and CSV formats
- Error messages/Fault diagnostics

CAT. NUMBER

	Software included, without thermoblock
BS-010171-A01	230VAC 50/60Hz Euro plug
BS-010171-A02	230VAC 50/60Hz UK plug
BS-010171-A03	230VAC 50/60Hz AU plug
BS-010171-A04	100-240VAC 50/60Hz US plug

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	0.936...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
PC system requirements	Intel/AMD Processor, 1 GB RAM, Windows 10/11, USB, Bluetooth
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 × 0.5 ml + 12 × 1.5 ml microtubes

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

20 × 0.2 ml microtubes + 12 × 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 semi-skirted microplate (0.2 ml) for PCR or 12 × 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 × 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 × 3.6–4.5 ml cryotubes

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

24 × 1–1.8 ml cryotubes

VP-20C
BS-010176-TK
block

20 × ø12 mm round bottom tubes