

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



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 Vista/7/8/8.1/10/11, 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.