

TS-100, Thermo-Shaker for microtubes and PCR plates

DESCRIPTION

Thermo-Shaker TS-100 provides intensive mixing and temperature control of samples in microtest tubes or PCR plate. Functions of heating (up to +100°C) and mixing can be performed both simultaneously and independently, i.e. the unit implements three devices in one:

1. Shaker;
2. Dry-block Thermostat;
3. Thermo-Shaker.

TS-100 is used for DNA analysis sample preparation, for extraction of proteins, polysaccharides, lipids and other cellular components. Features of TS-100 meet the increased requirements of the user, including:

- Quickly reaches the set mixing speed and maintains same amplitude of rotation around the block;
- Stable maintenance of the temperature of a wide range over the entire surface of the block;
- LCD display shows the set and actual temperature, speed and time;
- Quiet engine operation, compact size, long service life.

Heating source is a printed heating board (12 V). Mixing is provided by movement of orbital type.

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



CAT. NUMBER

| Without thermoblock | Without thermoblock |
|---------------------|---|
| BS-010120-AAI | 230VAC 50/60Hz Euro plug |
| BS-010120-AAQ | 230VAC 50/60Hz UK plug |
| BS-010120-AA4 | 230VAC 50/60Hz AU plug |
| BS-010120-AAJ | 100VAC 50/60Hz US plug, 120VAC 60Hz US plug |
| BS-010120-HK | IQ OQ document |
| BS-010120-IK | PQ document |

SPECIFICATIONS

| | |
|--|--|
| Temperature setting range | +25°C ... +100°C |
| Temperature control range | +5°C above 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 | 4°C/min |
| Temperature uniformity over the block at +37°C | ±0.1°C |
| Temperature uniformity over the block at +100°C | ±0.2°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 |
| Overall dimensions (W×D×H) | 220x240x90 mm |
| Weight | 3.7 kg |
| Input current/power consumption | 12 V, 3.5 A / 42 W |
| External power supply | Input AC 100–240 V; 50/60 Hz; Output DC 12 V |

ACCESSORIES



SC-18
BS-010120-AK
block

20 × 0.5 ml + 12 × 1.5 ml
microtubes



SC-18/02
BS-010120-CK
block

20 × 0.2 ml microtubes + 12 ×
1.5 ml microtubes



SC-24N
BS-010120-GK
block

24 × 1.5 ml microtubes



SC-24
BS-010120-EK
block

24 × 2 ml microtubes



SC-96A
BS-010120-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.