

TS-100C Pro, Programmierbarer Thermoschüttler mit Heiz- und Kühlfunktion

BESCHREIBUNG

The TS-100C Pro is a programmable laboratory thermo-shaker that combines precise heating and cooling, intensive mixing and interchangeable thermoblocks in one compact instrument. Designed for repeatable sample-preparation workflows, it allows users to create and save multi-step programs directly on the touchscreen. This reduces repeated manual parameter changes and the need to transfer samples between separate heating, cooling and mixing instruments.



KEY BENEFITS

- **Heating, cooling and mixing** in one instrument for efficient temperature-controlled sample preparation.
- **Mixing speeds up to 2500 rpm** support intensive mixing, bead resuspension, extraction and lysis workflows.
- **Automatic thermoblock recognition** identifies the installed block and limits the maximum mixing speed accordingly.
- **Quick thermoblock exchange** without external tools or separate cable connections reduces setup time between applications.
- **Advanced on-screen programming** with up to 20 saved programs and up to 20 steps per program, including holds, repetitions and parameter transitions.
- **Clear touchscreen interface** displays set and actual temperature, speed, time and program status at a glance.
- **Quick Mix function** starts a short mixing cycle using the selected parameters without creating a complete program.
- **Optional heated lid** helps minimise condensation during temperature-controlled workflows. The instrument recognises the lid automatically, while lid heating can be switched on or off as required.
- **Five configurable user profiles and screen lock** help protect established methods and prevent unintended changes in shared laboratories.
- **Integrated system and maintenance information** provides access to the serial number, firmware version, operating hours, calibration status, service reminders and diagnostics. The operating manual can be accessed using an on-screen QR code.

APPLICATIONS

The TS-100C Pro is suitable for **DNA and RNA extraction, NGS library preparation, magnetic-bead cleanup and resuspension, cell lysis, protein extraction, enzymatic reactions, incubation, hybridisation and analytical sample preparation.**

A range of interchangeable thermoblocks allows the instrument to be configured for different compatible tubes, strips and plate formats.

*Maximum mixing speed depends on the installed thermoblock.

TECHNISCHE DATEN

Temperatur-Einstellbereich	+4°C ... +100°C
Temperatur-Regelbereich	15°C unter Umgebungstemperatur ... +100°C
Einstellgenauigkeit	0.1°C
Stabilität	±0.1°C
Temperaturgenauigkeit bei +37°C	±0.5°C
Durchschnittliche Heizgeschwindigkeit von +25°C bis +100°C	8°C/Min
Durchschnittliche Kühlgeschwindigkeit von +100°C bis +25°C	5°C/Min
Durchschnittliche Kühlgeschwindigkeit von +25°C bis +4°C	1.8°C/Min
Temperaturgleichmäßigkeit über dem Block bei +4°C	±0.6°C
Temperaturgleichmäßigkeit über dem Block bei +37°C	±0.1°C
Temperaturgleichmäßigkeit über dem Block bei +100°C	±0.3°C
Bereich des Temperaturkalibrierungskoeffizienten	0.936...1.063 (± 0.063)
Drehzahleinstellbereich	250–2500 rpm
Digitale Zeiteinstellung	1 Min bis 96 h / ohne Unterbrechung (Einstellschritte 1 min)
Orbitdurchmesser	2 mm
Anzeige	3,5" TFT, 320x480
Maximale Betriebszeit ohne Unterbrechung	168 Stunden
PC connection	USB-C
Gewicht	5,1 kg
Eingangsstrom/Stromverbrauch	12 V DC, 11,5 A / 138 W
Externes Netzgerät	Eingang AC 100-240 V; 50–60 Hz; Ausgang DC 12 V



TSP-20/RB12
BS-010178-AK
Block

20 × ø12 mm Röhren mit
rundem Unterteil

TSP-24/1.5
BS-010178-KK
block

24 x 1,5ml-Mikroröhrchen

TSP-24/2.0
BS-010178-JK
Block

24 × 2 ml-Mikroröhrchen

TSP-96/PCR
BS-010178-HK
Block

96-Well-Mikroplatte (0.2 ml) für
PCR oder 12 x 8-Schnitt 0,2ml-
Mikroteststreifen oder 96 x
0,2ml-Mikroteströhrchen

TSP-20/0.5+12/1.5
BS-010178-MK
Block

20 × 0,5 ml + 12 × 1,5ml-
Mikroröhrchen

TSP-20/0.2+12/1.5
BS-010178-LK
Block

20 × 0,2 ml + 12 × 1,5ml-
Mikroröhrchen

TSP-32/0.5
BS-010178-EK
Block

32 × 0,5 ml-Mikroröhrchen

TSP-8/5
BS-010178-IK
Block

8 × 5 ml Röhren

TSP-8/15
BS-010178-FK
Block

8 × 15 ml Röhren

TSP-4/50
BS-010178-GK
block

4 × 50 ml Röhren

TSP-20/CV10
BS-010178-DK
Block

20 × 10mm Küvetten

TSP-24/CRYO4
BS-010178-CK
Block

24 × 3,6–4,5 ml Kryoröhrchen

TSP-24/CRYO1.8
BS-010178-BK
Block

24 × 1–1,8 ml Kryoröhrchen



**Beheizbarer Deckel für TS-100C
Pro**
BS-010178-NK

Abnehmbare, separat
beheizbare Abdeckung zur
Temperatur- und
Kondensationskontrolle