

Bio TDB-100, Dry block thermostat

DESCRIPTION

Bio TDB-100 is a compact easy-to-use dry block thermostat designed for long incubation processes at various temperatures. The universal aluminium block can accommodate 3 most popular microtest tubes' types.

Simultaneous indication of set and actual temperature and time.

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 at +37°C	±0.1°C
Temperature uniformity at +37°C	±0.1°C
Temperature calibration coefficient range	0.936...1.063 (± 0.063)
Block capacity	24x2/1.5 ml + 15x0.5 ml + 10x0.2 ml microtubes
Block diameter / depth	Ø 130 mm / 45 mm
Digital time setting	1 min–96 hrs / non–stop (increment 1 min)
Timer sound signal	+
Display	LCD, 2x16 signs
Overall dimensions (WxDxH)	210x230x115 mm
Weight	2.8 kg
Power consumption (230 V)	200 W (870 mA)
Nominal operating voltage	230 V, 50/60 Hz or 120 V, 50/60 Hz



CAT. NUMBER

With built-in block	With built-in block
BS-010412-AAA	230VAC 50/60Hz Euro plug
BS-010412-AAB	230VAC 50/60Hz UK plug
BS-010412-AA3	230VAC 50/60Hz AU plug
BS-010412-AAC	100VAC 50/60Hz US plug, 120VAC 60Hz US plug
BS-010412-AK	IQ OQ document
BS-010412-BK	PQ document

CH 3-150, Heating and cooling thermostat, Combitherm-2

DESCRIPTION

Combitherm-2 CH 3-150 is specially designed to thermostabilise materials at temperatures from -3°C to $+150^{\circ}\text{C}$ according to methods of analysis. To obtain useful functionality and decrease foot-print of instruments Combitherm-2 consists of 2 independent cooling and heating plug-in thermoblocks combined in a common electronic circuit board as well as inside a common external body. The left part of the front keyboard is responsible for setting parameters for cooling plug-in blocks and the right part — for heating plug-in blocks. Both of them are regulated independently and can realize up to 16 programs including temperature and time in each program. Peltier technology is used for cooling below room temperature; PCB is used for heating till $+150^{\circ}\text{C}$.

Separation of cooling and heating parts from each other increases durability of the instrument and speed of temperature changing after setting a new program.

Different block types can be provided on request



SPECIFICATIONS

Heating block Temperature setting range	$+25^{\circ}\text{C} \dots +150^{\circ}\text{C}$
Heating block Temperature control range	5°C above ambient $\dots +150^{\circ}\text{C}$
Heating block Setting resolution	1°C
Heating block Stability	$\pm 0.1^{\circ}\text{C}$
Temperature calibration coefficient range	$0.936 \dots 1.063 (\pm 0.063)$
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Cooling block Temperature setting range	$-3^{\circ}\text{C} \dots +20^{\circ}\text{C}$
Cooling block Temperature control range	23°C below ambient $\dots 5^{\circ}\text{C}$ below ambient
Cooling block Setting resolution	0.1°C
Cooling block Stability	$\pm 0.1^{\circ}\text{C}$
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Digital time setting	1 min–99 hrs 59 min (increment 1 min)
Timer sound signal	+
Display	LCD
User adjustable programs (temperature and time)	16 (heating) + 16 (cooling)
Overall dimensions (W×D×H)	295×285×220 mm
Weight	5.6 kg
Input current/power consumption	1.8 A / 430W
Power supply	230 V, 50/60 Hz

CAT. NUMBER

Without thermoblock	Without thermoblock
BS-010418-AAA	230VAC 50/60Hz Euro plug
BS-010418-NK	IQ OQ document
BS-010418-OK	PQ document



B2-50
BS-010418-AK
block

Ø48 mm x 2 sockets depth 58 mm



B10-16
BS-010418-BK
block

Ø16 mm x 10 sockets depth 56 mm



B6-25
BS-010418-CK
block

Ø25 mm x 6 sockets depth 40 mm



B23-1.5
BS-010418-DK
block

23 sockets for 1.5 ml microtest tubes depth 35 mm



B10-13
BS-010418-LK
block

Ø13 mm x 10 sockets, flat bottom, depth 30 mm



B5-29
BS-010418-KK
block

Ø29 mm x 5 sockets, flat bottom, depth 40 mm



B18-12
BS-010418-EK
block

18 sockets for Ø12x75 mm round bottom tubes, depth 58 mm

CH-100, Heating/Cooling Dry Block

DESCRIPTION

CH-100 is the result of combining two popular Biosan instruments:

1. Heating Dry block and
2. Cooling Dry block thermostat

The combined construction of aluminium block and Peltier element module cooled with the forced ventilation radiator provides fast changing of the cooling and heating modes.

CH-100 is a very effective instrument of sample preparation during enzyme reactions, hybridization reactions, DNA analysis.

Microprocessor controlled time and temperature. Simultaneous indication of set and actual temperature and time.

Blocks (built in) capacity:

- 1) with CH-1 block for 20 x 0.5 ml + 12 x 1.5 ml microtubes;
- 2) with CH-2 block for 20 x 1.5 ml microtubes;
- 3) with CH-3 block for 20 x 2 ml microtubes.

SPECIFICATIONS

Temperature setting range	-10°C ... +100°C
Temperature control range	30°C below ambient ... +100°C
Temperature setting resolution	0.1°C
Temperature stability	±0.1°C
Temperature uniformity at +37°C	±0.25°C
Temperature calibration coefficient range	0.936...1.063 (± 0.063)
Digital time setting	1 min–96 hrs / non–stop (increment 1 min)
Timer sound signal	+
Display	LCD, 2x16 signs
Overall dimensions (W×D×H)	240x260x165 mm
Weight	3.2 kg
Input current/power consumption	12 V, 4.4 A / 55 W
External power supply	Input AC 100–240 V 50/60 Hz, Output DC 12 V



CAT. NUMBER

With block CH-1	With block CH-1
BS-010410-BAI	230VAC 50/60Hz Euro plug
BS-010410-BAQ	230VAC 50/60Hz UK plug
BS-010410-BA4	230VAC 50/60Hz AU plug
BS-010410-BAC	100VAC 50/60Hz US plug, 120VAC 60Hz US plug
With block CH-2	With block CH-2
BS-010410-CAI	230VAC 50/60Hz Euro plug
BS-010410-CAQ	230VAC 50/60Hz UK plug
BS-010410-CA4	230VAC 50/60Hz AU plug
BS-010410-CAC	100VAC 50/60Hz US plug, 120VAC 60Hz US plug
With block CH-3	With block CH-3
BS-010410-UAI	230VAC 50/60Hz Euro plug
BS-010410-UAQ	230VAC 50/60Hz UK plug
BS-010410-UA4	230VAC 50/60Hz AU plug
BS-010410-UAC	100VAC 50/60Hz US plug, 120VAC 60Hz US plug
BS-010410-AK	IQ OQ document
BS-010410-BK	PQ document

CRFT, Controlled rate freezer and thawer

DESCRIPTION

Liquid nitrogen and cryogen free controlled rate freeze and thaw system for cryopreservation - CRFT.

The CRFT brings accuracy, precision and reproducibility to biological cryopreservation. This unit is ideal for research into the cryopreservation of a wide range of material including embryos, stem cells, mammalian cells, spermatozoa, antibodies, tissue sections and rodent organs.

The freezing and thawing rate is precisely controlled, ensuring accuracy and reproducibility throughout the freezing and thawing profiles, especially for the important nucleation/seeding phase. This provides optimal recovery of cells on thawing. Operation is simple and can be carried out with or without a PC.

Applications

The CRFT is highly versatile and can be used for the cryopreservation research of a wide range of samples in cryovials, straws, bags, microplates and Matrix-96-well block plates in the following areas:

- Transgenic embryology research
- Stem cell research
- Clinical and research samples, e.g. lymphocytes and tissue cell lines in conventional cryovials
- Various mammalian cells including cardiomyocytes, adipose, liver and muscle
- Cord blood derived stem cells
- Adherent cells and stem cells in microplates
- Cell suspensions in numbered/barcoded arrays
- System integrations
- Suitable for applications in veterinarian IVF

Key features and benefits

- Accurate and reproducible control of cooling rates and sample temperatures
- A focus on maximising cell survival rates
- Controlled and customisable freezing and thawing
- Linear and non-linear freezing profiles
- Liquid nitrogen, alcohol and cryogen free – no need for 'topping up'
- Interchangeable heads for flexibility (ordered separately)
- Free of charge software allows you to design, track, export and report temperature profiles
- Easy to use and samples can be nucleated/seeded in-situ
- Low running costs: estimated at 1% of liquid nitrogen-controlled rate freezing and runs on a 24V supply
- Temperature range of -100°C to 30°C*
- Servicing and calibration options available
- Command protocols available

*Minimum head temperature achieved with sealed lid in place. Temperatures specified are applicable to CRFT head (sample temperatures may vary).

Biosan is the exclusive distributor of CRFT in NIS, Baltic and Eastern European countries.



CAT. NUMBER

CRFT EU	100-240VAC 50/60Hz, Euro plug
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Dry block heating systems with interchangeable blocks

DESCRIPTION

A versatile general purpose system with two removable/interchangeable blocks and a comprehensive specification to suit most dry block heating applications in the laboratory.

- Temperature range ambient +5°C to 130°C, with rapid heat-up time
- Stability: $\pm 0.1^{\circ}\text{C}$
- Uniformity: $\pm 0.1^{\circ}\text{C}$
- Digital temperature control for optimal precision
- Range of convenient features including alarms, single and dual point calibration, programmed start/stop, 'offset' for known sample temperature variation and choice of external or internal probes
- External probe available for accurate in-sample or in-block temperature control
- Includes block removal tool for easy and safe removal of blocks.



Applications

A source of precision temperature control for general, routine applications and sensitive analytical procedures including enzyme digestions, enzyme activity studies and nucleic acid hybridisations.

CAT. NUMBER

QBD1	230VAC 50/60Hz Euro plug
QBD1L	120VAC 60Hz US plug
QBD2	230VAC 50/60Hz Euro plug
QBD2L	120VAC 60Hz US plug
QBD4	230VAC 50/60Hz Euro plug
QBD4L	120VAC 60Hz US plug
QBH2	230VAC 50/60Hz Euro plug
QBH2L	120VAC 60Hz US plug

TDB-120, Dry block thermostat

DESCRIPTION

TDB-120 is a traditional Biosan's dry block thermostat for laboratory analysis. Thermostat is designed for maintaining constant temperature of samples in tubes inserted in the aluminium block sockets. Unprecedented high precision and uniformity of temperature over the block. **TDB-120** is widely used for PCR-analysis.

Microprocessor controlled temperature and time. Simultaneous indication of set and actual temperature and time.

Blocks (built in) specifications:

Two models are available offering a choice of tube configurations to meet the needs of many standard laboratory procedures:

Block A-103

21 × 0.5 ml + 32 × 1.5 ml + 52 × 0.2 ml microtubes

Block A-53

21 × 0.5 ml + 32 × 1.5 ml microtubes

SPECIFICATIONS

Temperature setting range	+25°C ... +120°C
Temperature control range	5°C above ambient ... +120°C
Temperature setting resolution	0.1°C
Temperature stability at +37°C	±0.1°C
Temperature uniformity at +37°C	±0.1°C
Temperature calibration coefficient range	0.968...1.031 (± 0.031)
Digital time setting	1 min–96 hrs / non–stop (increment 1 min)
Timer sound signal	+
Display	LCD, 2x16 signs
Overall dimensions (W×D×H)	230 × 210 × 110 mm
Weight	2.8 kg
Power consumption (230 V)	200 W (870 mA)
Nominal operating voltage	230 V, 50/60 Hz or 120 V, 50/60 Hz



CAT. NUMBER

With block A-53	With block A-103
BS-010401-PAA	230VAC 50/60Hz Euro plug
BS-010401-PAB	230VAC 50/60Hz UK plug
BS-010401-PA3	230VAC 50/60Hz AU plug
BS-010401-PAC	100VAC 50/60Hz US plug, 120VAC 60Hz US plug
With block A-103	With block A-103
BS-010401-QAA	230VAC 50/60Hz Euro plug
BS-010401-QAB	230VAC 50/60Hz UK plug
BS-010401-QA3	230VAC 50/60Hz AU plug
BS-010401-QAC	100VAC 50/60Hz US plug, 120VAC 60Hz US plug
BS-010401-CK	IQ OQ document
BS-010401-DK	PQ document