

*Your
Laboratory's
Solution*

GENE SERIES

TABLE TOP SERIES Product Catalog 2013/14

NANO SERIES

HYDRA SERIES

CHILLS SERIES

SAFE SERIES

Catalogue	
Content	Page No.
Liquid Handling	
TT-EP ElitePro Single Channel Adjustable Volume Pipette	2-3
Shaker	
TT-10/20/30 Orbital Shaker	4
TT-1500 Microplate Shaker	5
Centrifuge	
TT-2500 Microplate Centrifuge	6
TT-6000/TT-3K-10K Mini-Centrifuge	7-8
TT-14500 Microcentrifuge	9
Mix and Vortex	
TT-2500-VM Multi-Tube Vortex Mixer	10
TT-3000 Smart Mixer	11
Thermo Shaker	
TT-100C/H Thermo Shaker Incubator	12-13
TT-70-2-S/TT-60-4-S Microplate Thermo Shaker Incubator	14
Dry Bath Incubator	
TT-100F/HT/HL/CL/CTL Mini Dry Bath Incubator	15-16
TT-100DHT/DHC Dry Bath Incubator	17
TT-200BI Biological Indicator Incubator	18
TT-70-2/TT-60-4 Microplate Incubator	19
Sample Concentrator	
TT-200-96SC 96 Wells Sample Concentrator	20
TT-200-1-SC/TT-200-2-SC Sample Concentrator	21-22
TT-200-VS Visible Sample Concentrator	23-24
Others	
TT-825-S/L Infrared Micro-Sterilizer	25

TT-EP ElitePro Single Channel Adjustable Volume Pipette Series



TT-EP-CS
ElitePro
Carousel
Stand For Up
to 6 Pipettes

TT-EP ElitePro Single Channel Adjustable Volume Pipette series is the latest innovation based on ergonomics, comfort and accuracy aspects of liquid handling research. ElitePro is a well-balanced perfect module that comes in nine models with full adjustable volume ranging from 0.1µL to 10mL. Built with robust yet ergonomic construction, it is fully autoclavable at 121°C for complete sterility. The AccuLock brake feature helps to protect against accidental volume changes while the digital micrometer display is always visible. ElitePro is a premium pipette range that is lightweight and ergonomically designed, exhibits unsurpassed accuracy and extremely comfortable even after prolonged use.

Features:

• **Maximum Pipetting Comfort**

Reduced Pipetting Forces.

Spring pressure is engineered to minimize actuation forces to only 4.0 Newtons.

Ergonomically Contoured Tip Ejector Button.

Button is contoured and angled to protect against discomfort and reduce pressure on the thumb, minimize fatigue after prolonged use.

Hybrid Hook Design.

The 130° hook is positioned for an ergonomic finger rest and reduces tension while holding it.

Slim and Rounded Handle Design.

Handles are thin, rounded and smooth for comfortable fit in either the right or left hand.

• **Exceptional Accuracy and Reproducibility**

Adjustable Volume & Locking Wheel.

Features with continuously adjustable digital micrometer for volume setting and optional locking wheel positioned at the top of the handle to protect against unintentional volume change.

Air-jacketed Handle.

This feature eliminates volume expansion due to hand heat transfer.

Finely Polished Stainless Steel Piston & Chemical-resistant, Maintenance-free Seals.

Both features serve as precision ground and to ensure accurate performance, provide exceptional piston and seal life.

• **Versatility**

Compatible with a wide range of tips and most commonly used lab tubes.

• **Calibration Tool Included**

Free calibration tool supplied with each ElitePro Pipette. The unique open-ended design allows the wrench to be used without any disassembly and without removing the plunger button.



AccuLock system locks your volume selection precisely.

- The “teeth” of this error-proof arrestment device force your exact selection into position precisely.
- No more “eyeballing” the tiny increment lines of the volumeter.
- When you hear it click into place, you know your selection is correct, precise & secure!

Catalogue Number	Volume Range	Accuracy	Reproducibility
TT-EP-2U	0.1 - 2 μ L	\pm 12.0 - 1.5%	\leq 6.00 - 0.70%
TT-EP -10U	1 - 10 μ L	\pm 2.5 - 1.0%	\leq 1.50 - 0.40%
TT-EP -20U	2 - 20 μ L	\pm 2.5 - 1.0%	\leq 1.50 - 0.30%
TT-EP -50U	5 - 50 μ L	\pm 2.0 - 1.0%	\leq 1.50 - 0.25%
TT-EP -100U	10 - 100 μ L	\pm 1.8 - 0.8%	\leq 0.50 - 0.15%
TT-EP -200U	20 - 200 μ L	\pm 1.8 - 0.8%	\leq 0.50 - 0.15%
TT-EP -1M	100 - 1000 μ L	\pm 1.5 - 0.8%	\leq 0.30 - 0.15%
TT-EP -5M	1 - 5mL	\pm 1.2 - 0.6%	\leq 0.30 - 0.15%
TT-EP -10M	1 - 10mL	\pm 2.5 - 0.6%	\leq 0.30 - 0.15%

Ordering Information

Catalogue Number	Description
TT-EP-2U	ElitePro Single Channel Adjustable Volume Pipette, 0.1-2 μ L
TT-EP-10U	ElitePro Single Channel Adjustable Volume Pipette, 1-10 μ L
TT-EP-20U	ElitePro Single Channel Adjustable Volume Pipette, 2-20 μ L
TT-EP-50U	ElitePro Single Channel Adjustable Volume Pipette, 5-50 μ L
TT-EP-100U	ElitePro Single Channel Adjustable Volume Pipette, 10-100 μ L
TT-EP-200U	ElitePro Single Channel Adjustable Volume Pipette, 20-200 μ L
TT-EP-1M	ElitePro Single Channel Adjustable Volume Pipette, 100-1000 μ L
TT-EP-5M	ElitePro Single Channel Adjustable Volume Pipette, 1-5mL
TT-EP-10M	ElitePro Single Channel Adjustable Volume Pipette, 1-10mL
Accessories	Description
TT-EP-CS	ElitePro Carousel Stand For Up to 6 Pipettes

TT-10/20/30 Orbital Shaker



TT-10/20/30

TT-10/20/30 Orbital Shaker is a compact and extremely quiet shaker. It uses DC brushless motor and microcomputer control technology for quiet, simple and convenient operation. It allows real time programme correction; temperature, actual speed and operation time monitoring.

- Adjustable speed
- Automatic alarm by timer controller
- Speed and time LED Display
- Low Noise
- Stable
- Simple Operational panel
- Can be used in refrigerating warehouse
- Various type of platforms to fit with the orbital shaker



TT-P6-250ml



TT-P12-100ml



TT-UP-12



TT-PP4

Specifications	Model	TT-10 Orbital Shaker	TT-20 Orbital Shaker	TT-30 Orbital Shaker
Speed Range (rpm)		50-350	50-300	50-250
Type of Motion		Orbital	Orbital	Orbital
Orbit Size(mm)		10	20	30
Timer(min)		1min - 99h 59min	1min - 99h 59min	1min - 99h 59min
Operating Ambient (°C)		4-45	4-45	4-45
Display(speed & time)		Digital (LED)	Digital (LED)	Digital (LED)
Maximum Load Capacity		2.0	2.0	2.0
Dimension(mm)		284x264x108	284x264x108	284x264x108
Power(V)		AC100~230	AC100~230	AC100~230

Ordering Information

Catalogue Number	Description
TT-10-110V	Programmable Orbital Shaker TT-10, 50-350rpm, AC Adapter 110V
TT-10-230V	Programmable Orbital Shaker TT-10, 50-350rpm, AC Adapter 230V
TT-20-110V	Programmable Orbital Shaker TT-20, 50-300rpm, AC Adapter 110V
TT-20-230V	Programmable Orbital Shaker TT-20, 50-300rpm, AC Adapter 230V
TT-30-110V	Programmable Orbital Shaker TT-30, 50-250rpm, AC Adapter 110V
TT-30-230V	Programmable Orbital Shaker TT-30, 50-250rpm, AC Adapter 230V

Accessories	Description
TT-UP-12	UP-12 Universal platform with adjustable bars for various types of flasks and bottles
TT-P6-250	P6-250 Platform for 250ml flasks
TT-P12-100	P12-100 Platform for 100ml flasks
TT-PP4	PP-4 Flat platform with non-slip rubber mat

TT-1500 Microplate Shaker

TT-1500 Microplate Shaker is designed to use with PCR plates (96/384 holes), cell culture plates (24,48,96 holes plate), and ELISA plates. It is used mainly for solution mixing and shaking. It features an orbital shaking platform with a holding mechanism for 4 standard microplates. It can be used in a low temperature environment or culture box.



TT-1500

- LED Digital Display
- Simple and easy operation panel
- Real time speed and time monitoring
- DC brushless motor to drive shaking
- Low noise
- Stable
- Humanized timing function, alarm notification after program completion
- Accommodate 4 standard PCR plates or microplates
- Shaking speed range for standard plate is 300-1500rpm; for deepwell plate is 300-1000rpm

Specifications	Model	TT-1500 Microplate Shaker
Speed Range (rpm)		300-1500
Type of Motion		Horizontal
Orbit Size(mm)		3
Timer(min)		99h 59min
Display(speed & time)		Digital (LED)
Weight (kg)		6.0
Dimension(mm)		284x264x121
Power(V)		AC100~230

Ordering Information

Catalogue Number	Description
TT-1500-110V	Microplate Shaker TT-1500, AC Adapter 110V
TT-1500-230V	Microplate Shaker TT-1500, AC Adapter 230V

TT-2500 Microplate Centrifuge



TT-2500

TT-2500 Microplate Centrifuge is designed to use with 96 holes microplates. It can quickly spin down droplets, and is used before and after thermal cycler to improve PCR yield. Microplate can be inserted vertically from the top with no sample leakage caused by surface tension mechanism.

- Can be used with skirted, non-skirted and all standard PCR plates
- Can be used inside refrigerator
- Accelerate to 2500rpm quickly
- Brushless DC motor
- Emergency cut off if it exceeds 10s from the maximum speed.
- Low Noise
- Stable
- Help to improve PCR yield

Specifications	Model	TT-2500 Microplate Centrifuge
Rotor Speed (rpm)		2500
Capacity		2 PCR plates
G Force(g)		500
Type of Rotor		Fixed Vertically
Display(speed & time)		Digital (LED)
Weight (kg)		3.0
Dimension(mm)		219(W)x190(D)x186(H)
Power(V)		AC100~230

Ordering Information

Catalogue Number	Description
TT-2500-110V	Microplate Centrifuge TT-2500, AC Adapter 110V
TT-2500-230V	Microplate Centrifuge TT-2500, AC Adapter 230V

TT-6000 / TT-3K-10K Mini-Centrifuge

TT-6000 / TT-3K-10K Mini-Centrifuge is a fixed-speed personal mini-centrifuge that is designed for quick spin downs of microsamples. Operation is simple and fast by loading the sample tubes, close the lid and the rotor accelerates to 6,000rpm (3,000xg). This speed range is ideal for bringing small droplets to the bottom of the tubes, for micro-filtrations and basic separation applications.

The similarly compact TT-3K-10K Mini-Centrifuge allows adjustable quick spins ranging from 3,000rpm to 10,000rpm in 1,000rpm increment. This indicates a single unit is equivalent to eight mini-centrifuges!

Both units feature compact design with a small footprint with its ergonomically designed lid that specifically designed to fit in the palm for ease of repeat opening and use.



TT-6000



TT-3K-10K

Features:

- Two interchangeable rotors to accommodate PCR tubes and PCR strips
- Compact and small foot print
- 1.5 x greater centrifugal force than ordinary rotor
- Simple spin activation by closing the lid and open the lid for rotor deceleration
- Lids automatically opens up to an angle of 95° by pressing the cover lid release button
- Adjustable digital timer
- Easy and quick exchange of rotors without any tools
- Low noise

Includes:

- Eight-place microtube rotor for 1.5ml/2ml tubes
- Eight-place PCR tube strip rotor for two 0.2ml PCR tube strips or 16 single tubes
- Eight adapters for 0.5ml tube for customized use
- Eight adapters for 0.2ml tube for customized use



TT-6000

TT-3K-10K

Model	TT-6000 Mini-Centrifuge	TT-3K-10K Mini-Centrifuge
Speed	6,000rpm	3,000rpm-10,000rpm (with increment of 1,000rpm)
Relative Centrifugal Force	3,000 g	1,000g-7,500 g
Capacity	8x1.5ml/2ml tubes 8x0.5ml/8x0.2ml tubes (using adapters) Two 8x0.2ml tube strips 16x0.2ml tubes	8x1.5ml/2ml tubes 8x0.5ml/8x0.2ml tubes (using adapters) Two 8x0.2ml tube strips (used only when $\leq 6,000$ rpm) 16x0.2ml tubes (used only when $\leq 6,000$ rpm)
Noise	≤ 45 dB	≤ 55 dB
Timer	1s - 9999min	1s - 999min
Dimension	176x156x121 (mm)	
Net Weight	1.52kg	
Power	220V/110V, 50-60Hz	

Ordering Information

Catalogue Number	Description
TT-6000-110V	Mini-Centrifuge, TT-6000, 110V
TT-6000-220V	Mini-Centrifuge, TT-6000, 220V
TT-3K-10K-110V	Mini-Centrifuge, TT-3K-10K, 110V
TT-3K-10K-220V	Mini-Centrifuge, TT-3K-10K, 220V
Accessories	Description
TT-RT-815	Microtube Rotor for Mini-Centrifuge, 8x1.5ml
TT-RT-802	Strip Tube Rotor for Mini-Centrifuge, 2x8x0.2ml
TT-AP-802	Adapter for 0.2ml tubes, (Pack of 8)
TT-AP-805	Adapter for 0.5ml tubes, (Pack of 8)

TT-14500 Microcentrifuge



TT-14500

TT-14500 Microcentrifuge is a compact personal-sized 12-place centrifuge that achieves maximum rotation speeds of 14,500 rpm (14,000 x g) which is able to accommodate microtubes of 1.5ml/2.0ml or even smaller volumes with adapters. It is versatile and ideal for use in a variety of applications across academic research, life science and pharmaceutical research.

Features:

- Compact and small foot print conserves benchtop space
- Anodized aluminium rotor holds maximum 12x1.5/2.0ml microtubes
- Optional adapters available for 0.2ml and 0.5ml tubes
- Simplified operation with clear LED display
- Quiet operation
- Separate Short Spin key for quick spins
- Autoclavable rotors (at 121°C for 20 minutes)
- Simple configuration/setting of rpm and RCF
- Timer can be set up to 99 minutes



Specifications	Model	TT-14500 Microcentrifuge
Maximum rotational speed		14,500 rpm
Relative centrifugal force (RCF)		14,000 x g
Timer		20 sec – 99 min
Acceleration time to max. speed		42 s
Braking time from max. speed		55 s
Dimension in mm (WxDxH)		240 x 212 x 138
Power supply		100V or 240V, 50/60Hz
Power requirement		105W

Ordering Information

Catalogue Number	Description
TT-14500-100V	Microcentrifuge, TT-14500, 100V
TT-14500-240V	Microcentrifuge, TT-14500, 240V
Accessories	Description
TT-14500-A02	Adapters for 0.2ml tubes, (Pack of 12)
TT-14500-A05	Adapters for 0.5ml tubes, (Pack of 12)

TT-2500-VM Multi-Tube Vortex Mixer

TT-2500-VM Multi-Tube Vortex Mixer is designed to handle a batch of 50 samples. It has two built-in operation modes, which can be controlled either by short mixing or time mixing. Vortexing action is created with holding the top tray of the vessel securely in place and moving the bottom tray freely in a defined and eccentric orbit.

- Process 50 samples at once
- LED Speed and Time Display
- Microprocessor Control
- Variety of accessories for different types of test tubes
- Two built-In operation mode:
 - 1) Short Mixing
 - 2) Time Mixing
- DC brushless motor create quiet and rattle-free mixing
- Stable



TT-2500-VM



Specifications	Model	TT-2500-VM Multi Tube Vortex Mixer
Speed Range (rpm)		500-2500
Programmer Timer(min)		1s-9999m
Accuracy (rpm)		±50 (at 2500rpm detection)
Working Diameter (mm)		4
Maximum Loading(Kg)		5.0
Weight (kg)		21.50
Dimension(mm)		426x250x480
Power(V)		AC100~230
Top Panel Size (mm)		311x184

Ordering Information

Catalogue Number	Description
TT-2500-VM-110V	Multi-Tube Vortex Mixer TT-2500-VM, AC Adapter 110V
TT-2500-VM-230V	Multi-Tube Vortex Mixer TT-2500-VM, AC Adapter 230V

Accessories	Description
TT-2500-VM-10	50 x Φ 10mm tube frame, 50 holes
TT-2500-VM-12	50 x Φ 12mm tube frame, 50 holes
TT-2500-VM-13	50 x Φ 13mm tube frame, 50 holes
TT-2500-VM-16	50 x Φ 16mm tube frame, 50 holes
TT-2500-VM-25	50 x Φ 25mm tube frame, 50 holes
TT-2500-VM-29	50 x Φ 29mm tube frame, 50 holes
TT-2500-VM-H	Tray Pad Set (Upper & lower)

TT-3000 Smart Mixer



TT-3000



TT-3000 Smart Mixer has 3-in-1 built-in function. It can mix, shake and vortex at an adjustable speed control from 300 to 3000 rpm. It is ideal for mixing and vortexing aqueous solutions and suspensions in various types of microtest tubes or plates. This compact, versatile shaker offers short-time, touch-activated function or continuous operation. Variable speed control and optional attachments make this shaker ideal for a wide range of mixing applications. Silicone feet and ultra-high vibration dampening base make this shaker stable at high speeds. Self-ventilated motor provides for continuous operation with minimal heating. All accessories (sold separately online) click onto unit in virtually any position.

- 3-in-1 format Mixing, Shaking and Vortexing applications
- Universal holder: allow mixing of all kinds of plates and tubes
 - 1) PCR plates (skirted, semi-skirted, unskirted)
 - 2) 384 PCR Plate
 - 3) 96 and 384 deepwell plates
 - 4) MTPs, enzyme label plate
 - 5) 0.2ml PCR tubes & PCR strips
 - 6) 0.2, 0.5, 1.5, 2.0ml micro test tubes
- Vortexing of numerous tube formats (eg: 15ml and 50ml tubes)
- Quiet and stable

Specifications	Model	TT-3000 Smart Mixer
Shaking Speed Range (rpm)		300-3000 (increment: 10rpm)
Orbit (mm)		3 mm
Vortex Speed Range (rpm)		3500
Adjustable Mixing time(min)		1s-99h 59min (continuous)
Noise Level		≤52db
Weight (kg)		4.5
Dimension(mm)		270(W) x 196(D) x 170(H)
Power(V)		AC100~230

Ordering Information

Catalogue Number	Description
TT-3000-110V	Smart Mixer TT-3000, AC Adapter 110V
TT-3000-230V	Smart Mixer TT-3000, AC Adapter 230V

Accessories	Description
TTC/H-100-MIX-A	96 x 0.2ml tube holders
TTC/H-100-MIX-B	24 x 0.5ml tube holders
TTC/H-100-MIX-C	24 x 1.5ml / 0.2ml tube holders

* 96 well skirted PCR plate, 384 PCR plate, deepwell plate can be used directly, without stand support needed.

TT-100C/H Thermo Shaker Incubator



TT-100C/TT-100H

TT-100C/TT-100H Thermo Shaker Incubator is programmed with mixing, shaking, heating and cooling function. It has a fast mixing motion. Designed to mix various microvolume tubes, PCR plate, deep well plate as well as microplate. It also allows vortexing and heating all kinds of tubes.

- Adjustable mixing speed
- Highly efficient shaking and temperature control
- Programmable function
- Microprocessor controlled and accurate temperature
- Various block option
- Built in temperature calibration
- DC brushless motor drive
- 3-in-1 module
 - 1) Plate (shaking and mixing) – PCR plates, 384 PCR plate, 96 and 384 deepwell plates
 - 2) Tube stand (shaking and mixing) – 0.2ml PCR tubes and PCR strip tubes stand, 0.5ml microtubes stand, 1.5/2.0ml microtubes stand
 - 3) Blocks (shaking, mixing and incubating)

Specifications	Model	TT-100C Thermo Shaker Incubator	TT-100H Thermo Shaker Incubator
Mixes		Cooling	Heating
Temperature Range (°C)		0-100	R.T. +5-100
Block Temperature Uniformity		≤±0.3°C	≤±0.3°C
Temperature Control Accuracy		±0.3°C	±0.3°C
Temperature Accuracy		≤0.5min (@37°C)	
Shaking Speed(rpm)		300-1500	300-2000
Shaking Orbit(mm)(horizontal)		3	3
Heating Time		≤20min (from 20°C-100°C)	≤20min (from 20°C-100°C)
Cooling Time		≤25min from R.T. to R.T. -20°C	N/A
Cooling Speed		≥7°C/min (from 100°C to 20°C) ≥1.20°C/min (from R.T. to R.T.-20°C)	N/A
Power Requirement (W)		200	200
Dimension(mm)		270(L) x 196(W) x 170(H)	270(L) x 196(W) x 170(H)
Weight (kg)		8.3	6.8

Ordering Information

Catalogue Number	Description
TT-100C-110V	Thermo Shaker Incubator(Cooling), TT-100C, AC Adapter 110V
TT-100C-230V	Thermo Shaker Incubator(Cooling), TT-100C, AC Adapter 230V
TT-100H-110V	Thermo Shaker Incubator(Heating), TT-100H, AC Adapter 110V
TT-100H-230V	Thermo Shaker Incubator(Heating), TT-100H, AC Adapter 230V

Exchangeable blocks	Description
TTC/H-100-1	96x0.2ml PCR Plate
TTC/H-100-2	54 x 0.5ml
TTC/H-100-3	35 x 1.5ml
TTC/H-100-4	35 x 2.0ml
TTC/H-100-5	20 x 0.5ml + 15 x 1.5ml
TTC/H-100-6	24 x dia. $\leq \Phi$ 12mm
TTC/H-100-7	32 x 0.2ml + 25 x 1.5ml
TTC/H-100-8	32 x 0.2ml + 10 x 0.5ml + 15 x 1.5ml
TTC/H-100-9	103 x 67 x 30 (water bath block)
TTC/H-100-10	96 x 0.2ml plate (no holes)
TTC/H-100-MIX-A	96 x 0.2ml tube holders
TTC/H-100-MIX-B	24 x 0.5ml tube holders
TTC/H-100-MIX-C	24 x 1.5ml / 0.2ml tube holders

TT-70-2-S/ TT-60-4-S Microplate Thermo Shaker Incubator



TT-70-2-S



TT-60-4-S

TT-70-2-S/TT-60-4-S Microplate Thermo Shaker Incubator is designed to provide orbital shaking and heating of the sample. It has a heating platform of micro-plates and a thermo lid to allow achieving exact set temperature of each well. LCD display indicates set and actual temperature, time and shaking speed.

- LCD display for set and actual temperature, time and shaking speed
- Used with microplates and cell culture plates
- Thermo lid, allows achieving exact set temperature for each well
- Alarm signal after operation ends
- Quiet and stable operation

Specifications	Model	TT-70-2-S Microplate Thermo Shaker Incubator	TT-60-4-S Microplate Thermo Shaker Incubator
Temperature Range (°C)		R.T. +5-70	R.T. +5-70
Temperature Accuracy (°C)			<0.3 (@ 37°C)
Platform Temperature Uniformity (°C)			±0.5
Heating time from RT until 70°C/ 60°C (min)		<25	<25
Time Range (min)			0- 99h 59min
Shaking Speed (rpm)			300-1200
Capacity		2 plates	4 plates
Power (W)		150	250
Dimension (LxWxH) (mm)		284 x 264 x 157	345 x 310 x 178
Shaking Orbit (mm)		3	2

Ordering Information

Catalogue Number	Description
TT-70-2-S-110V	Thermo Shaking Incubator, TT-70-2-S, 110V
TT-70-2-S-230V	Thermo Shaking Incubator, TT-70-2-S, 230V
TT-60-4-S-110V	Thermo Shaking Incubator, TT-60-4-S, 110V
TT-60-4-S-230V	Thermo Shaking Incubator, TT-60-4-S, 230V

TT-100F/HT/HL/CL/CTL Mini Dry Bath Incubator



TT-100F/HT/HL/CL/CTL

TT-100F/HT/HL/CL/CTL Mini Dry Bath Incubator is designed for heating and cooling of small volume samples – up to 2.0mL. The built-in microcomputer controls the semiconductor refrigeration or heating. 100L series has an additional lid heating function to prevent sample evaporation. 100F has a built in fan to cool down sample rapidly.

- Heating and cooling functions
- Various blocks for convenient replacement, cleaning and disinfection.
- Automatic fault detection and buzzer alarm functions
- Actual time and temperature display
- Quiet and stable



Model	TT-100F	TT-100HT	TT-100HL	TT-100CL	TT-100CTL
Function	Cooling (Fan)	Heating	Heating	Cooling	Cooling
Temperature Range(°C)	R.T. +5°C– 100°C	R.T. +5°C– 100°C	R.T. +5°C– 100°C	-10°C – 100°C	-10°C – 100°C
Maximum Temperature (°C)			100		
Temperature Accuracy (°C)			≤±0.5 @ 100°C		
Heating Time(min)			≤15 min (from 20°C to 100°C)		
Block Temperature Difference			0.3°C @ 40°C		
Block Temperature Uniformity			≤±0.3°C		
Display Accuracy (°C)			0.1		
Timing Range (min)			0-999		
Cooling Type	Fan Cooling	Natural Cooling		≤30min from R.T. to R.T. -20°C	
Thermo Lid	No	No	Yes	No	Yes
Power (W)		60		120	
Weight (kg)		≤1		≤1.4	

Ordering Information

Catalogue Number	Description
TT-100F-110V	Mini Dry Bath Incubator TT-100F, Cooling Fan, 110V
TT-100F-230V	Mini Dry Bath Incubator TT-100F, Cooling Fan, 230V
TT-100HT-110V	Mini Dry Bath Incubator TT-100HT, Heating, 110V
TT-100HT-230V	Mini Dry Bath Incubator TT-100HT, Heating, 230V
TT-100HL-110V	Mini Dry Bath Incubator TT-100HL, Heating, Thermo Lid, 110V
TT-100HL-230V	Mini Dry Bath Incubator TT-100HL, Heating, Thermo Lid, 230V
TT-100CL-110V	Mini Dry Bath Incubator TT-100CL, Cooling, 110V
TT-100CL-230V	Mini Dry Bath Incubator TT-100CL, Cooling, 230V
TT-100CL-110V	Mini Dry Bath Incubator TT-100CTL, Cooling, Thermo Lid, 110V
TT-100CTL-230V	Mini Dry Bath Incubator TT-100CTL, Cooling, Thermo Lid, 230V

Accessories (Exchangeable Block)	Description
TT-100-Block-A	40 x 0.2ml tube / 8 x 0.2ml strip
TT-100-Block-B	24 x 0.5ml tube
TT-100-Block-C	15 x 1.5ml tube
TT-100-Block-D	15 x 2.0ml tube
TT-100-Block-E	8-12.5 x 12.5mm cuvette

TT-100-DHT/DHC Dry Bath Incubator



TT-100-DHT/DHC



Exchangeable Block

TT-100-DHT/DHC Dry Bath Incubator is designed for heating and cooling of variety of tube and plate samples. The built-in microcomputer controls the semiconductor refrigeration or heating.

- Heating and cooling functions
- Various blocks to accommodate tube and plate samples
- Automatic fault detection and buzzer alarm functions
- Actual time and temperature display
- Quiet and stable

Model	TT-100-DHT Dry Bath Incubator	TT-100-DHC Dry Bath Incubator
Temperature Range (°C)	R.T. +5°C – 100°C	R.T. -10°C – 100°C
Temperature Control Accuracy @ 100°C		≤±0.5°C
Block Temperature difference @ 40°C		0.3°C
Block Temperature Uniformity		≤±0.3°C
Heating Time (min)		≤15 (From 20°C to 100°C)
Maximum Temperature (°C)		100
Cooling Time @ 26°C of ambient temperature	N/A	≤30 min from ambient to ambient -30°C
Power (W)		150
Weight (kg)		2.2
Dimension(mm)		270(L) x 196(W) x 170(H)

Ordering Information

Catalogue Number	Description
TT-100-DHT-110V	Dry Bath Incubator, Heating, TT-100-DHT, 110V
TT-100-DHT-230V	Dry Bath Incubator, Heating, TT-100-DHT, 230V
TT-100-DHC-110V	Dry Bath Incubator, Cooling, TT-100-DHC, 110V
TT-100-DHC-230V	Dry Bath Incubator, Cooling, TT-100-DHC, 230V

Accessories (Exchangeable Block)	Description
TT-100-DH-Block-A	96 x 0.2ml PCR plate
TT-100-DH-Block-B	54 x 0.5ml
TT-100-DH-Block-C	35 x 1.5ml
TT-100-DH-Block-D	35 x 2.0ml
TT-100-DH-Block-E	20 x 0.5ml + 15 x 1.5ml
TT-100-DH-Block-F	24 x Diameter ≤12mm tubes
TT-100-DH-Block-G	32 x 0.2ml + 25 x 1.5ml
TT-100-DH-Block-H	32 x 0.2ml + 10 x 0.5ml + 15 x 1.5ml
TT-100-DH-Block-I	103 x 67 x 30mm (water bath block)
TT-100-DH-Block-J	96 x 0.2ml Microplate

TT-200BI Biological Indicator Incubator



TT-200BI Biological Indicator Incubator is designed for temperature incubation of Ethylene Oxide and other biological indicators. It provides easy monitoring and verification of incubation temperature.

- LCD Display for temperature and time simultaneously.
- Automatic fault detection and buzzer alarm
- Built-in temperature calibration function
- Built-in over temperature protection device
- Variety of sample blocks
- Custom made blocks are allowed

Specifications	Model	TT-200BI Biological Indicator
Adjustable Temperature Range (°C)		RT +5 - 100
Temperature Uniformity @ 56°C		≤±0.5
Temperature Stability (°C)		±0.5
Temperature Accuracy (°C)		0.1
Heating Time		<6 min (from 20°C to 56°C)
Power(V)		AC100~230

Ordering Information

Catalogue Number	Description
TT-200BI-110V	Biological Indicator Incubator, TT-200BI, 110V
TT-200BI-230V	Biological Indicator Incubator, TT-200BI, 230V

Accessories	Description
TT-200BI-Block-10	15 x Ø10mm
TT-200BI-Block-12	12 x Ø12mm
TT-200BI-Block-15	6 x Ø15mm
TT-200BI-Block-16	6 x Ø16mm
TT-200BI-Block-9	18 x Ø9mm



TT-70-2



TT-60-4

TT-70-2/ TT-60-4 Microplate Incubator

TT-70-2/TT-60-4 Microplate Incubator is designed to provide heating of the sample. It has a heating platform of microplates and a thermo lid to allow achieving exact set temperature of each well. LCD display indicates set and actual temperature, time and shaking speed.

- LCD display for set and actual temperature and time
- Used with microplates and cell culture plates
- Thermo lid, allows achieving exact set temperature for each well
- Alarm signal after operation ends
- Quiet and stable operation

Model	TT-70-2	TT-60-4
Specifications	Microplate Incubator	Microplate Incubator
Temperature Range (°C)	R.T. +5-70	R.T. +5-70
Temperature Accuracy (°C)		<0.3 (@ 37°C)
Block Temperature Uniformity (°C)		±0.5
Heating time from RT until 70°C (min)	<25	<25
Time Range (min)		0- 99h 59min
Capacity	2 plates	4 plates
Power (W)	150	250
Dimension (LxWxH) (mm)	248 x 264 x 157	345 x 310 x 178

Ordering Information

Catalogue Number	Description
TT-70-2-110V	Microplate Incubator, TT-70-2, 110V
TT-70-2-230V	Microplate Incubator, TT-70-2, 230V
TT-60-4-110V	Microplate Incubator, TT-60-4, 110V
TT-60-4-230V	Microplate Incubator, TT-60-4, 230V

TT-200-96SC 96 Wells Sample Concentrator



TT-200-96SC

TT-200-96SC 96 Wells Sample Concentrator is designed for fast evaporation of solvents in 96 wells plate. It is light and compact, suitable to use in fume cupboard when toxic solvents are being evaporated. The principal of this instrument is by blowing down gas Nitrogen into heated surface of the sample, making solvent evaporate and separated rapidly, thereby concentrating sample without Oxygen. This is to replace high cost rotary evaporation instrument.

- Concentrate dozens of samples simultaneously
- Simple to install, operate and maintain
- Standard gas needle length: 80mm
- Flow regulation of each needle can be controlled with optional flow regulating valve.
No wastage of gas
- Can be used in fume cupboard when concentrating toxic solvents
- Built-in over temperature protection device, automatic fault detection system and alarm function
- Compact food print, fit all standard fume cupboards
- LED display of temperature and time
- Interchangeable block

Model	TT-200-96SC
Specifications	96 Wells Sample Concentrator
Temperature Range (°C)	RT +5 - 150
Heating Time (min)	≤30min (from 40°C to 150°C)
Temperature Uniformity (100°C)	±0.5
Temperature Accuracy(°C)	±0.5 (40-100°C) , ±1°C (100-150°C)
Block Quantity	1 block
Temperature Display Accuracy (°C)	0.1°C
Time Range	99h 59min
Nitrogen Flow Rate (L/min)	0 – 10
Nitrogen Pressure (MPa)	≤0.1
Power (W)	200
Dimension (L x W x H) (mm)	260 x 220 x 500

Ordering Information

Catalogue Number	Description
TT-200-96SC-110V	96 Wells Sample Concentrator, TT-200-96SC, 110V
TT-200-96SC-230V	96 Wells Sample Concentrator, TT-200-96SC, 230V
TT-DT-16	Block Replacement for TT-200-96SC, 96 x 0.2ml Centrifugal Tube
TT-DT-17	Block Replacement for TT-200-96SC, Plate(no hole), for 96 hole enzyme plates

TT-200-1-SC/TT-200-2-SC Sample Concentrator

TT-200-1-SC/TT-200-2-SC Sample Concentrator is designed for fast evaporation of solvents in each sample tube. It is light and compact, suitable to use in fume cupboard when toxic solvents are being evaporated. The principal of this instrument is by blowing down gas Nitrogen into heated surface of the sample, making solvent evaporate and separated rapidly, thereby concentrating sample without Oxygen. This is to replace high cost rotary evaporation instrument.



TT-200-1-SC



TT-200-2-SC

- Concentrate dozens of samples simultaneously
- Simple to install, operate and maintain
- Adjustable needle depth
- Standard needle length: 150mm
- Flow regulation of each needle can be controlled with optional flow regulating valve. No wastage of gas
- Can be used in fume cupboard when concentrating toxic solvents
- Built-in over heat protection device, automatic fault detection system and alarm function
- Compact food print, fit all standard fume cupboards
- LED display of temperature and time
- Interchangeable block

Specifications	Model	TT-200-1-SC Sample Concentrator	TT-200-2-SC Sample Concentrator
Temperature Range (°C)		RT +5 to 150	
Heating Time (min)		≤30min (from 40°C to 150°C)	
Temperature Accuracy(°C)		±0.5 (40-100°C) , ±1°C (100-150°C)	
Temperature Uniformity (100°C)		±0.5°C	
Block Quantity		1	2
Time Range		99h 59min	
Nitrogen Flow Rate (L/min)		0 – 10	
Nitrogen Pressure (MPa)		≤0.1	
Power (W)		200	400
Dimension (LxWxH) (mm)		230 x 200 x 500	260 x 200 x 500

Ordering Information

Catalogue Number	Description
TT-200-1-SC-110V	Sample Concentrator, TT-200-1-SC, 110V
TT-200-1-SC-230V	Sample Concentrator, TT-200-1-SC, 230V
TT-200-2-SC-110V	Sample Concentrator, TT-200-2-SC, 110V
TT-200-2-SC-230V	Sample Concentrator, TT-200-2-SC, 230V

Accessories	Description
TT-DT-01A	Block Replacement, 12 x Ø 6mm
TT-DT-02A	Block Replacement, 12 x Ø 7mm
TT-DT-03A	Block Replacement, 12 x Ø 10mm
TT-DT-04A	Block Replacement, 12 x Ø 12mm
TT-DT-05A	Block Replacement, 12 x Ø 13mm
TT-DT-06A	Block Replacement, 12 x Ø 15mm
TT-DT-07A	Block Replacement, 12 x Ø 16mm
TT-DT-08A	Block Replacement, 12 x Ø 19mm
TT-DT-09A	Block Replacement, 6 x Ø 20mm
TT-DT-10A	Block Replacement, 6 x Ø 26mm
TT-DT-11A	Block Replacement, 4 x Ø 28mm
TT-DT-12A	Block Replacement, 2 x Ø 40mm
TT-DT-13A	Block Replacement, 12 x 0.5ml centrifugal tube
TT-DT-14A	Block Replacement, 12 x 1.5ml centrifugal tube
TT-DT-15A	Block Replacement, 12 x 2.0ml centrifugal tube
TT-DT-16A	Block Replacement, 12 x 0.2ml centrifugal tube

TT-200-VSC Visible Sample Concentrator

TT-200-VSC Visible Sample Concentrator is designed for fast evaporation of solvents in each sample tube. It is light and compact, suitable to use in fume cupboard when toxic solvents are being evaporated. The principal of this instrument is by blowing down gas Nitrogen into heated surface of the sample, making solvent evaporate and separated rapidly, thereby concentrating sample without Oxygen. You can monitor the liquid level position of each sample at any time. This is to replace high cost rotary evaporation instrument.



TT-200-VSC



- Concentrate dozens of samples simultaneously
- Visible liquid level of each sample
- Simple to install, operate and maintain
- Adjustable needle depth
- Flow regulation of each needle can be controlled with optional flow regulating valve.
No wastage of gas
- Can be used in fume cupboard when concentrating toxic solvents
- Built-in over temperature protection device, automatic fault detection system and alarm function
- Compact food print, fit all standard fume cupboards
- LED display of temperature and time
- Interchangeable block

Specifications	Model	TT-200-VSC Visible Sample Concentrator
Temperature Range (°C)		RT +5 - 150
Heating Time (min)		≤30 min (from 40°C to 150°C)
Temperature Uniformity (100°C)		±1°C
Temperature Accuracy (°C)		±1°C (40-100°C), ±1.5°C (100-150°C)
Temperature Display Accuracy (°C)		0.1°C
Block Quantity		1 block
Time Range		99h 59min
Nitrogen Flow Rate (L/min)		0 – 10
Nitrogen Pressure (MPa)		≤0.1
Power (W)		400
Dimension (L x W x H) (mm)		260 x 220 x 520

Ordering Information

Catalogue Number	Description
TT-200-VSC-110V	Visible Sample Concentrator, TT-200-VSC, 110V
TT-200-VSC-220V	Visible Sample Concentrator, TT-200-VSC, 220V

Accessories	Description
TT-200-VSC-NK01	Block Replacement, 12 x Φ 10mm
TT-200-VSC-NK02	Block Replacement, 12 x Φ 12mm
TT-200-VSC-NK03	Block Replacement, 12 x Φ 13mm
TT-200-VSC-NK04	Block Replacement, 12 x Φ 15mm
TT-200-VSC-NK05	Block Replacement, 12 x Φ 16mm
TT-200-VSC-NK06	Block Replacement, 12 x Φ 19mm
TT-200-VSC-NK07	Block Replacement, 12 x Φ 20mm

TT-825-S / TT-825-L Infrared Micro-Sterilizer



TT-825-S

TT-825-S / TT-825-L Infrared Micro-Sterilizer utilizes infrared heat that produce 825°C to incinerate organic material deep within the ceramic funnel. It is ideally used to provide complete sterilization of platinum inoculating loops, needles, glass tube or pipette mouths in 5-7 seconds.

The ceramic heating element is safely enclosed in a perforated stainless steel guard chamber, protects users from accidental contact with extreme temperatures of the core element. It is simple to use, simply insert loop or needle into the funnel. It has a lower temperature setting (480°C) that is used as 'standby' mode to extend the shelf life of heating chamber.



TT-825-L

Features:

- Safe, convenient and compact sterilizer for inoculating loops, needles and glass tubes, pipette mouths, metal and borosilicate glass instruments
- Asbestos-free core element producing 825°C
- Rapid and complete infrared sterilization in 5-7 seconds
- Prevent infectious spatter and cross contamination
- Adjustable angle heating chamber
- Can be used in anaerobic and aerobic chamber
- Safeguard users without open flame and hazardous gas

Specifications	Model	TT-825-S Infrared Micro-Sterilizer	TT-825-L Infrared Micro-Sterilizer
High Temperature Setting		825°C ± 50°C	
Low Temperature Setting		480°C	
Sterilization Time		5-7 seconds	
Chamber Diameter		14mm	35mm
Chamber Length		140mm	100mm
Net Weight		1.3kg	1.5kg
Operating Temperature		5-40°C	
Electrical Requirement		110V or 220V, 50-60Hz	

Ordering Information

Catalogue Number	Description
TT-825-S-110V	Infrared Micro-Sterilizer, 14mm, TT-825-S, 110V
TT-825-S-220V	Infrared Micro-Sterilizer, 14mm, TT-825-S, 220V
TT-825-L-110V	Infrared Micro-Sterilizer, 35mm, TT-825-L, 110V
TT-825-L-220V	Infrared Micro-Sterilizer, 35mm, TT-825-L, 220V



Note

A series of horizontal dashed lines for taking notes.

TABLE TOP SERIES

Product Catalog

USA Headquarters :

Hercuvan Lab Systems Inc.
2260 Rutherford Rd., Suite109,
Carlsbad, CA 92008 USA.

Tel. +1.858.335.8871
Fax. +1.858.240.7116

Email. info@hercuvan.com
Web. www.hercuvan.com

Asia Pacific :

Hercuvan Lab Systems Sdn Bhd 842288-T
Revongen Corporation Center
No 12A, Jalan TP5, Taman Perindustrian UEP,
47600 Subang Jaya, Selangor Darul Ehsan,
Malaysia.

Tel. +6 03 8025 1603
Fax. +6 03 8025 1637

Email. info@hercuvan.com
Web. www.hercuvan.com