Y&S
LABORATORY
The Evolutionary Science

pH METER
TRANSILLUMINATOR
DRY BATH
CELL FREEZER
LIQUID HANDLING

INCUBATOR SHAKER
STIRRER & SHAKER
COLONY COUNTER

GEL IMAGING
HYBRIDIZATION
THERMAL CYCLER
CENTRIFUGE
WATER BATH
SPECTROPHOTOMETER
OVEN & INCUBATORS

ELECTROPHORESIS

BenchTop Lab Systems

Contents

Agarose Gel Electrophoresis
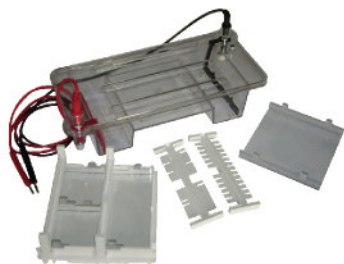
- Made from high quality Polycarbonate, exquisite and durable
- It is transparent, convenient for observation
- Withdraw able electrode, convenient for maintenance
- Special gel casting device for easy and fast gel casting operation
- Power fails when you open the lid for users' safe
- Save buffer solution
- Black band on the gel tray make it convenient to load the samples and observe the gel
- High resolution separation with simple operation
- Two lines of gel can be run at the same time
- One gel casting device can cast different size of gel

Model No.	BT–DYCP-31BN	BT–DYCP-31CN	BT–DYCP-31DN	BT–DYCP-31E
Gel Dimensions (mm)	60 × 60	100 x 70, 50 x 70	60 × 60, 120 × 60 60 × 120, 120 × 120	150 × 160 200 × 160
No. of Samples	6, 8, 11	8, 15	13, 18, 25	17, 34
Comb Thickness (mm)	1.0 & 1.5	1.0 & 1.5	1.0 , 1.5 & 2.0	1.5
Buffer Volume (ml)	120	260	650	1000
Size (mm)	197 x 96 × 64	260 x 116 x 76	310 × 150 × 90	360 × 1950 × 100

SDS-PAGE Electrophoresis

- Casting and running the gel at the same place
- Casting device makes gel casting simply and save your precious time
- Molded buffer tank equipped the electrodes with pure platinum
- Special configuration design avoid the mistakes during the operation
- Two gels can be run simultaneously under identical buffer conditions
- Run one gel or run two gels at the same time
- Transparent tank for visibility without obstructions
- Easy and convenient to add the sample
- Power fails when you open the lid for users' safe
- High resolution separation with simple operation
- Different combs and spacers is available

Model No.	BT-DYCZ-24DN	BT-DYCZ-24EN	BT-DYCZ-24F
Gel Dimensions (mm)	83 × 75	130 × 100	200 × 175
No. of Samples	10 or 15	12 or 16	16 or 21
Comb Thickness (mm)	1.0 & 1.5	1.0 & 1.5	1.0 & 1.5
Buffer Volume (ml)	400	1200	3500
Size (mm)	150 × 100 × 140	190 × 170 × 120	300 × 160 × 300

Power Supply

- With Time & Timer Control
- LED display for easier read in the dark room
- Automatic parameter limit crossover for protecting the experiment and instrument
- Automatic recovery after power failure
- Four pairs of power outlets for parallel run
- Built-in safety features
- Recommend for Electrophoresis and Blotting application

Model No.	BT-PS-600
Voltage Range	5 – 600V in 1V steps
Current Range	1 – 500mA in 1mA steps
Timer Range	Built-in timer range – 99H– 59min, fully adjustable
Operating Modes	Constant Voltage, constant current
Display	LED display

Agarose Gel Electrophoresis

- Designed for years of reproducible and rigorous use
- Easy and simple to use, save buffer solution
- Withdrawable electrode, convenient for maintenance
- A comprehensive assortment of accessories supplied with the systems

Model No.	BT-03-01-E	BT-03-02A-E	BT-03-02B-E	BT-03-03-E	BT-03-07-E	BT-03-09-E
Gel Dimension (mm)	100 x 70	130 x 130	130 x 250	200 x 200	300 x 250	200 x 370
No. of Samples	8	13	13	26	99 (33 x 3)	120 (40 x 3)
Buffer Volume (ml)	250	350	550	800	1200	1250

UVT-Transparent Agarose Gel Electrophoresis

Model No.	BT-03-UV01-E	BT-03-UV02A-E	BT-03-UV02B-E	BT-03-UV03-E
Gel Dimension (mm)	100 x 70	130 x 130	130 x 250	200 x 200
No. of Samples	8	13	13	26
Buffer Volume (ml)	250	350	550	800

SDS-PAGE Electrophoresis system

- Designed for years of reproducible and rigorous use
- Easy and simple to use, save buffer solution
- Withdrawable electrode, convenient for maintenance
- A comprehensive assortment of accessories supplied with the systems

Model No.	BT-05-01S-E	BT-05-01D-E	BT-05-02S-E	BT-05-02D-E	BT-05-03S-E	BT-05-03D-E
Gel Dimension (mm)	80 x 70		160 x 140		160 x 140	
No. of Gel	Single	Dual	Single	Dual	Single	Dual
No. of Samples	7	14	13	26	20	40
Buffer Volume (ml)	100 + 150	150 + 200	150 + 200	250 + 500	300 + 600	300 + 700

Power Supply

- Operates in constant current & constant voltage mode
- Digital display for volt, current & timer
- Runs gels simultaneously
- Feather touch knobs
- Over-load &short-circuit protection

Model No.	BT-PS100-NI	BT-PS300-NI	BT-PS500-NI
Voltage	0 - 300V	0 - 300V	0 - 500V
Current	0 - 100mA	0 - 300mA	0 - 500mA
Timer	0 – 9.99hrs		
Outputs Terminals	2	4	
Dimensions (mm)	240 x 160 x 110 (mm)	240 x 280 x 120	
Power Requirements	200-260 VAC/50Hz		

Western Blotting

- Made from high quality acrylic with platinum electrodes
- Latches on the gel holder cassette for easy handling
- Fast transferring speed and good transferring effect
- A seamless, injection-molded transparent buffer tank prevents leakage and breakage
- Allows easy orientation for rapid, error free set-up
- An efficient design simplifies insertion and removal of the gel holder cassette from supporting body for transfer (electrode assembly)
- Compatible with the lid and the buffer tank of BT-DYCZ-24DN

Model No.	BT-DYCZ-40D
Dimensions (mm)	Pore plate combination for 95 × 87
Power	40W
Working Time	Continuous ≥24 hours
Buffer Volume (ml)	400 - 450
Size (mm)	150 × 100 × 140

Semi-Dry Bloter

- Made from high quality acrylic
- Consists of a bottom anode unit and a top cathode unit
- Graphite electrode is mounted on the top of the bottom unit
- Top cathode unit is also fixed with a graphite electrode and sits on the anode

Model No.	BT-SDB1-E	BT-SDB2-E
Gel size	10 x 10 cm	20 x 20 cm
Electrode	Graphics Electrode Assembly	
Non-Conducting Sheets	1 No.	
Connecting cord	1 Set	

Power Supply

- With Time & Timer Control
- LED display for easier read in the dark room
- Automatic parameter limit crossover for protecting the experiment and instrument
- Automatic recovery after power failure
- Four pairs of power outlets for parallel run
- Built-in safety features
- Recommend for Electrophoresis and Blotting application

Model No.	BT-PS-600
Voltage Range	5 – 600V in 1V steps
Current Range	1 – 500mA in 1mA steps
Timer Range	Built-in timer range – 99H– 59min, fully adjustable
Operating Modes	Constant Voltage, constant current
Display	LED display

UV-Transilluminator

- With genuine quartz filters that pass fixed UV wavelength and no visible light to give a perfect observation
- High intensity UV tubes
- Electronic high frequency ballast to give instant start and no humming
- Low heat generation and fan cooled interior
- The enclosure is epoxy coated MS and top is stainless steel
- Low (70%) / high(100%) intensity control
- Special polymer transparent safety cover in UV models that protects the user from UV emissions
- Suitable for academic, research and medical applications

UV-Transilluminator (Single Wave-Length)

Model	Wavelength	Viewing Surface	Intensity	Application
BT-UVT-E1	312 nm	20 x 20 cm	6 x 8W	Analytical Nucleic Acid Gel
BT-UVT-E2	365 nm	20 x 20 cm	6 x 8W	View Nucleic Acid Gel
BT-UVT-E1+	312 nm	21 x 26 cm	6 x 8W	Analytical Nucleic Acid Gel
BT-UVT-E2+	365 nm	21 x 26 cm	6 x 8W	View Nucleic Acid Gel

UV-Transilluminator (Single Wave-Length)

Model	Wavelength	Viewing Surface	Intensity	Application
BT-UVT-E3	312 & 365 nm	20 x 20 cm	4 x 8W + 4 x 8W	Analytical Nucleic Acid Gel
BT- UVT-E4	254 & 312 nm	20 x 20 cm	4 x 8W + 4 x 8W	Irradiate + Nucleic Acid
BT- UVT-E3+	312 & 365 nm	21 x 26 cm	4 x 8W + 4 x 8W	Analytical Nucleic Acid Gel
BT- UVT-E4+	254 & 312 nm	21 x 26 cm	4 x 8W + 4 x 8W	Irradiate + Nucleic Acid

Gel-Imaging System

- The universal platform stands alone to provide the lowest cost yet high quality digital scientific analysis and visualization system for labs
- Reproducible, high-resolution digital images for gel documentation
- Featuring a 12 megapixel camera, the camera connects to a PC through a USB and can be controlled from the PC
- Filter size of transilluminator is 20x20 cm.
- Maximum gel size that can be captured is 15 x 15cm
- The transilluminator can be used separately too, in case the user just wants to observe the gel

Model No.	BT-GDS15-E	BT-GDS15S-E
Camera Resolution	12.2 megapixels	
Camera Sensor	Sensitive CMOS	
Lens	18-55 mm	
Lens Focus	Motorized	
Lens Zoom	Manual	
Lens Aperture	Motorized	
Maximum Gel Size	15 x 20 cm	
Trans-illumination	UV 302-312 nm, 6x8W long life tubes	
Epi-White light illumination	Included	
Filter	Band pass for EtBr	
Software for Capture & Editing	Included	
Software for Analysis of Gels	Not Available	Advanced TotalLab 1D, UK

Gel-Doc & Analysis System

- Excellent optics coupled to a high quality camera, the gel documentation system, is a high performance and reliable fluorescent and colorimetric bio-imaging system
- Featuring a 12 megapixel camera, the camera connects to a PC through a USB and can be controlled from the PC
- The light-tight cabinet has a UV safety switch and a roll-out transilluminator
- The dark room cabinet has features for safety switch that switches off the UV lights as soon as the door is open. Also, a timer is attached to the transilluminator, which automatically switches off UV lights in case the user forgets to switch them off. This increases the life of UV tubes

Model No.	BT-GDS20-E	BT-GDS20S-E
Camera Resolution	12.2 megapixels	
Camera Sensor	Sensitive CMOS	
Lens	18-55 mm	
Lens Focus	Motorized	
Lens Zoom	Manual	
Lens Aperture	Motorized	
Maximum Gel Size	20 x 20 cm	
Trans-illumination	UV 302-312 nm, 6x8W long life tubes	
Epi-White light illumination	Included	
Filter	Band pass for EtBr	
Software for Capture & Editing	Included	
Software for Analysis of Gels	Not Available	Advanced TotalLab 1D, UK

- Professional gel and bio-imaging system, ideal for research labs and applications where sensitivity is of prime importance
- Options for colorimetric, fluorescent imaging and upgradeable to chemiluminiscence
- Featuring a high resolution, sensitive scientific grade CCD camera, the camera connects to a PC and can be controlled from the PC
- The light-tight cabinet has a UV safety switch and a roll-out transilluminator
- The dark room cabinet has features for safety switch that switches off the UV lights as soon as the door is open
- Additionally, a timer is provided that switches off UV in case the user forgets to shut off the transilluminato
- Exposure Control from 0.01s to 100s
- Excellent dynamic range, 3.5 orders of magnitude EtBr 590 filter

Model No.	BT-GDS12S-E	BT-GDS16S-E
Camera Resolution	1.4 megapixels, 12 bit	1.4 megapixels, 16 bit
Camera Sensor	Sensitive Scientific CCD	
Lens	6x zoom, 8.5-51 mm, Manual	6x zoom, 8.5-51 mm, motorized
Lens Focus	Manual	Motorized
Lens Zoom	Manual	Motorized
Lens Aperture	Manual	Motorized
Maximum Gel Size	20 x 20 cm	21 x 26 cm
Trans-illumination	UV 302-312 nm, 6x8W long life tubes	
Epi-White light illumination	Included	
Filter	Band pass for EtBr	

Dry Bath

- LCD Simultaneous display of set and actual time, temperature
- Built-in temperature calibration function
- Automatic fault detection and buzzer alarm function
- 24V DC power supply input, built-in over-temperature protection device, safe and stable

Model No.	BT-MiniB-100	BT-MiniB-100L	BT-MiniC-100	BT-MiniC-100L
Temperature Range	Amb. + 5° ~ 100°C		-10° ~ 100°C	
Thermo Lid	No	Yes	No	Yes
Temperature uniformity	≤±0.3°C			
Display Accuracy	0.1°C			
Timer	999min			
Maximum Power	60W		120W	
Cooling Time	-	≤30min	-	≤30min
Optional Blocks	A) 40 x 0.2ml B) 24 x 0.5ml C) 15 x 1.5ml D) 15 x 2.0ml E) 8 cuvettes (12.5 x 12.5 mm) F) 4 x 15ml (cover cannot be closed) G) 2 x 50ml (cover cannot be closed)			

- Fast heating speed. Heating temperature accurate
- Built-in temperature deviation calibration function, automatic fault detection, and beep alarm function
- Built-in over-temperature protection device, safe and reliable
- Serious of round heating blocks for choosing. Easy exchange and clean for different types of tubes

Model No.	BT-DKT-100
Temperature Range	Amb.+5°C ~ 100°C
Heating Time	≤ 10min (from 20°C ~ 100°C)
Time Setting	9999 min
Temperature Uniformity	≤ ± 0.5°C
Display Accuracy	0.1°C
Maximum Power	150W
Dimension (mm)	176 x 156 x 121
Optional Blocks	A) (24 x 0.5ml) + (30 x 1.5ml) B) 96 x 0.2ml C) 59 x 0.5ml D) 39 x 1.5ml E) 39 x 2.0ml F) 18 x 5.0ml

- LCD display, simple interface, double time and temperature settings, Simultaneous display of set temperature display, time diminishing display
- High heating speed, uniform heating, accurate temperature control, high stability, low energy consumption and no noise
- Built in temperature calibration function, automatic fault detection and buzzer alarm function
- Built in over-temperature protection device, safe and reliable use, prolong the service life of the machine

Model No.	BT-DTC-100	BT-DTH-100
Temperature Range	-10°C ~ 100°C	Amb.+5°C ~ 100°C
Heating Time	≤15min (from 20°C ~ 100°C)	
Temperature Accuracy	≤±0.5°C (@ 100°C)	
Temperature Uniformity	≤±0.3°C	
Display Accuracy	0.1°C	
Timing Range	99h59min	
Cooling Time	≤30min)	-
Maximum power	150 W	
Dimensions (mm)	270 x 190 x 170	
Optional Blocks	A) 92 x 0.2ml PCR Plate B) 54 x 0.5ml C) 35 x 1.5ml D) 35 x 2.0ml E) 20 x 0.5ml + 15 x 1.5ml	

Water Bath

- Accurate temperature control
- PID controlled speed and temperature with LED digital display
- Made with SUS 304 stainless steel body with powder coating

Model No.	BT-BH-130D	BT-BH-230D	BT-BU-410D	BT-BH-420D
Type	Circulating		Non-Circulating	
Capacity	10 Ltrs.	20 Ltrs.	10 Ltrs.	20 Ltrs.
Temp. Range	Amb. +5° ~ 100°C			
Temp. Accuracy	± 0.1°C			
Sensor	PT-100Ω			
Timer	999h 999min 999sec			
Dimension Inner (mm)	295 x 235 x 150	495 x 295 x 150	295 x 235 x 150	495 x 295 x 150
Dimension Outer (mm)	340 x 310 x 280	532 x 340 x 310	410 x 280 x 170	540 x 345 x 260
Power	220v 60Hz			

- Tank is using seamless stainless steel and outside body is powder painting
- Overheat and over low temperature protector
- Sensor is using the PT-100Ω
- The compressor will be delayed to start working if power cut, Using environmental protection cold-media R134a.
- With circulator to unify temperature inside.
- Device of exterior circulator
- Pump of pressurize sold separately for your option.
- Have drainage

Model No.	BT-BL-710D-20	BT-BL-710-0	BT-BL-720D-20	BT-BL-720-0
Capacity	10 Ltrs		20 Ltrs	
Temp. Range	-20°C ~ 100°C	0°C ~ 100°C	-20°C ~ 100°C	0°C ~ 100°C
Temp. Accuracy	± 0.1°C			
Circulation pump	10Litres/min Max head 2M			
Temp. Control	PID Temp. control			
Temp. Display	LED Digital Display			
Compressor	1/4 Hp	1/6 Hp	3/4 Hp	1/2 Hp
Heater	1200W		1600W	
Inner Dimensions (mm)	200 x 300 x 150		300 x 360 x 180	
Overall Dimension (mm)	300 x 400 x 630		420 x 480 x 800	
Power	110V/220V; 50/60Hz			

Micro Centrifuge

- Low noise, smooth operation, the use of durable and maintenance free brushless DC motor, safety and reliable
- The use of advanced technology, wide voltage speed is not affected by voltage fluctuation, high speed precision
- Can accommodate filtering centrifuge tube, wide application range
- Random configuration two turned and two kinds of casing, multi-use
- Safety in line with international standards
- Use flip the switch function, lifted the lid that turn, open the stop, easy to operate

Model No.	BT-TD-6K	BT-TD-10K
Speed Range	6000 rpm	10000 rpm
Speed Control	Fixed	
Max. RCF	6000g	7500g
Rotor	6x1.5ml with (0.5ml/0.2ml/2.0ml tube adapters)	
PCR Strip Rotor	2 x 8 x 0.2ml PCR tube	
Noise	≤45dB	≤55dB

- Large radius rotor with 8 tube holes, centrifugal force is 1.5 times bigger than ordinary 6-hole rotor at the same rolling speed
- The cover switch is designed in such a way that it automatically bounce 95 degrees which is convenient for one-hand operation
- The rotor is clip-on fixed. It is very convenient for rotors exchanging and pick-and-place
- LED display the rolling speed and timing
- Maintenance- free motor, long life and safe
- Multi-purpose to meet different experiments demands

Model No.	BT-Mini-7K	BT-Mini-10K	BT-Mini-10K+
Speed Control	Fixed		Variable
Speed Range	7000rpm	10000rpm	3000 rpm ~ 10000 rpm
Max. RCF	3400g	7500g	1000g ~ 7500 g
Sample Capacity	8 x 1.5ml with (0.5ml and 0.2ml tube adapters)		
Time Range	1s - 99min59s		
Noise	≤55dB		
Dimension (mm)	175 x 156 x 121		
Power	220V/110V 50-60HZ		

Micro-Plate Centrifuge

- Accepts skirted, non-skirted and all standard PCR plates
- Strong centrifugal power: accelerate to 2500rpm quickly, Automatic brake
- Won't exceed 10S from the maximum speed
- Brushless DC motor is free of maintenance
- Humanized program design, short -spin and timing operation mode make the experiment more convenient and efficient
- Unique design: smart, less occupied space, simple operation, all cover 95 °open, convenient to fetch PCR

Model No.	BT-MiniP-2500
Capacity	2 PCR Plates
Max. Speed	2500 rpm
Max RCF	500 g
Rotor	Fixed vertically
Dimensions (mm)	219 × 190 ×186
Weight	3 kg
Voltage	DC24V 50-60 Hz

High-Speed Centrifuge

- Ideal for quick spin downs and motor filtration
- Precise control of speed and run with efficient separation
- DC motor drive, stable running and high accuracy of speed
- Rotor is seated on a tapered shaft which facilitates easily removal
- Accelerates and brakes in seconds
- Adjustable time and speed
- 3 in 1rotor

- Brushless DC motor- maintenance free, produces low heat, gives better power/weight ratio & fit for extended runs
- Imbalance detection with auto cut-off
- Microprocessor controlled with last run memory function
- Large back-lit LCD display for ease of setting & reading
- Better airflow design ensures lesser heat generation & less noise
- Lid lock safety – lid opens automatically on run completion
- Intuitive simple interface for quick & convenient setting
- Small footprint saves valuable bench space suitable for use in hoods or cold rooms

Model No.	BT-Mini-12K+	BT-Mini-15K++
Speed Range	12000 rpm	15000 rpm
Max. RCF	7500g	15596g
Rotor Capacity	a) 6 x 1.5ml/0.2ml/0.5ml b) 2 x 8 x 0.2ml PCR strips	c) 12 x 1.5ml/0.2ml/0.5ml d) 2 x 8 x 0.2ml PCR strips
Timer	1 ~ 99 minutes	1 ~ 99mins & infinite mode
Noise	≤45 DB	≤60 DB
Dimension (mm)	196 x 176 x 122	260 x 244 x 205
Power	AC 100-240V 50Hz/60Hz	110-230V AC, 50/60HZ

- The machine adopts brushless frequency conversion motor driving, micro-computer control, digital display
- All-steel body, stainless steel centrifugal chamber
- Electric lid lock, independent motor control, Rotor head identify automatically to prevent speeding
- RCF can be directly set up and display, without RPM / RCF translated
- Operation parameters of instruments can be modified during operation

Model No.	BT-TG-16S	BT-TG-16			BT-TG-18
Max speed	16000 rpm	16500 rpm			18000 rpm
Max RCF	17800 g	19070 g			22500 g
Max Capacity	8 x 5 ml (15000 rpm)	4 x 100 ml			6 x 100 ml
Speed Accuracy	± 30 rpm/min	± 10 rpm			
Timer Range	1~99 min				
Noise	≤ 60 dB(A)				
Power	AC 220V 50HZ 5A	AC 220V 50HZ 10A			
Motor	Brushless DC motor	Frequency conversion motor			
Dimension (mm)	305 x 250 x 235	430 x 340 x 330			
Optional Rotors	1) 12x1.5/2.2 ml 2) 12x5 ml	1) 12x1.5/2.2 ml 2)12x 5 ml 3) 24x1.5/2.2 ml	4)12x10 ml 5) 6x50 ml 6) 8x50 ml	7) 6x10 ml 8) 6x15 ml 9) 4x(8x0.2 ml)	

Refrigerated Centrifuge

- The refrigerating system uses imported compressors CFC-free refrigerants, refrigerating/heating double loop, which make the machine heating and cooling fast and have low noise as well as small vibration
- Prevent the over-speed and overload of the rotors
- Brushless frequency conversion driving, liquid crystal display, stainless steel centrifugal chamber, electronic safe locks and protection for imbalance
- Setting Could be switch between RPM/RCF

Model No.	BT-Min1412R	BT-Min1416R
Speed Range	500 ~ 14000 rpm	
Max RCF	13476 g	15010 g
Rotor Capacity	12 x 1.5 ml	16 x 1.5 ml
Temp. Range	-10°C ~ 30°C	
RMP/RCF Switch	Yes	
Timer	15 sec ~ 99 mins	
Dimensions (mm)	540 x 270 x 250	
Power	220V +10% , 50Hz +1Hz	
Optional Rotors	NA	6 x 5 ml & 2 x 2x 8 x 0.2 ml

- Brushless frequency conversion driving, liquid crystal display, stainless steel centrifugal chamber, electronic safe locks and protection for imbalance
- 12 operation procedures and 40 levels of acceleration and deceleration Faults are diagnosed automatically
- The refrigerating system uses imported compressors CFC-free refrigerants, refrigerating/heating double loop, which make the machine heating and cooling fast and have low noise as well as small vibration
- The operation parameters of the machine can be modified during operation
- Real-time timing
- Rotors are recognized automatically
- Prevent the over-speed and overload of the rotors

Model No.	BT-TGL-16S	BT-TGL-16		BT-TGL-18	
Max speed	16000 rpm	16500 rpm		18000 rpm	
Max RCF	18270 g	19070 g		22500 g	
Max Capacity	12 x 5 ml	4 x 100 ml		6 x 100 ml	
Speed Accuracy	± 10 rpm				
Temp. Accuracy	± 1°C				
Temp. Range	-20°C ~ 40°C				
Timer Range	1 ~ 99H59 min/inching				
Noise	≤ 60 dB(A)				
Power	AC 220V 50HZ 15A				
Motor	Variable frequency motor				
Dimension (mm)	420 x 625 x 360				
Optional Rotors	1) 12x1.5/2.2ml 2) 12x5ml 3) 24x1.5/2.2ml	1) 12 x 1.5/2.2ml 2) 12 x 5ml 3) 24 x 1.5/2.2ml	4) 12 x 10ml 5) 6 x 50ml 6) 8 x 50ml	7) 6 x 10ml 8) 8 x 15ml 9) 4 x (8 x 0.2 ml)	

Magnetic / Hot-Plate Stirrer

Magnetic Stirrer (Analog Model)

- Long using life with no carbon brush motor
- Installed with PT sensor for fail safe operation
- Strong magnetism to avoid stirrer jumping
- Knob for electronic variable speed control

Model No.	BT-MS-25	BT-MS-17A
Capacity	250 ml	2 Ltrs.
Speed Range	0 ~ 2500 rpm	0 ~ 1600 rpm
Platform Size (mm)	Φ88 mm	150 x 150
Power	100-240V; 50-60Hz	

Magnetic Stirrer (Digital Model)

- Long using life with no carbon brush motor
- Installed with PT sensor for fail safe operation
- Strong magnetism to avoid stirrer jumping
- Knob for electronic variable speed control

Model No.	BT-MS-17D	BT-MS-15D
Capacity	2 Ltrs.	20 Ltrs.
Speed Range	200 ~ 1500 rpm	200 ~ 1500 rpm
Platform Size (mm)	150 x 150	155 x 155
Power	100-240V; 50-60Hz	

Hot-Plate Stirrer (Digital Model)

- Long life with no carbon brush motor
- Ceramic coated plate, chemically resistant
- Thermal insulation for cool body operation
- Even heat distribution
- Digital set up temperature controller
- Speed regulation, large range of speed
- Strong magnetism to avoid stirrer jumping
- Single multi-turn intelligent knob operation

Model No.	BT-MSH-17D	BT-MSH-15D
Capacity	2 Ltrs.	20 Ltrs.
Speed Range	200 ~ 1500 rpm	
Temp. Range	Amb.+5 ~ 380°C	
Adjustable safety cut-off	50 ~ 400°C	
Platform Size (mm)	150 x 150	
Power	230/115 V 50/60 Hz	

Vortex Mixer

- Touch or continuous operation
- Adapters securely clicked onto appliance in any position
- Suit for mixing tubes / centrifugal tubes with prominent mixing effect
- Eccentric with oilless ball bearings

Model No.	BT-MIX-28	BT-MIX-40+	BT-MIX-25+
Speed Range	2800 rpm	0 ~ 4000 rpm	0 ~ 2500 rpm
Speed Mode	Fixed Speed	Variable Speed	
Orbit	4.5 mm		4 mm
Capacity	50ml		
Dimension (mm)	110 x 70		127 × 130 × 160
Power	230V / 15W		220V / 60W

- Brushless DC Motor for maintenance free long life
- Touch or continuous operation
- Inbuilt counter balance (No working issues)
- Optional attachment for Microplate, Microtubes & others
- Pulse mode programming feature (set On & Off times in secs)

Model No.	BT-MIX-25	BT-MIX-25P	BT-MIX-30S	BT-MIX-42D
Speed Range	0 ~ 2500 rpm		300 ~ 3000 rpm	300 ~ 4200 rpm
Orbit	4 mm	3 mm	2 mm	4 mm
Type	Analog		Digital	
Timer	N/A		1s ~ 999 min.	
Dimensions (mm)	132 x 156 x 150		132 x 156 x 150	127 × 130 × 160
Power	220V / 60W			
Optional Attachment	A) for Tubes D) 36 x 0.5ml G) 4 x 50ml J) 2 x 50ml	B) for Beakers E) 20 x 1.5/2ml H) 22 x 1.5ml/2ml K) 96well plates P) Platform for B/C/D/E/F/G	C) 70 x 0.2ml F) 8 x 15ml I) 4 x 15ml L) Platform for A/B/C	A) For Tubes B) For Plates C) For Beaker

Compact mixer with a high efficiency, multiple functions. It integrates design principle of mixing and shaking with intelligent operation and can be applied to a variety of mixing and vortex shaking operation. It not only can mix various micro volume tube, PCR plate, deep hole plate and micro plate and other common laboratory supplies ,but also equips the function of vortexing all kinds of tubes. Unique design principle, which combines mixing and shaking with intelligent operation make the operation simpler, safe, and convenient.

Model No.	BT-MS-35		
Shaking Speed Range	300 ~ 3000 rpm (Increment: 10rpm)		
Vortex Shaking Speed	3500 rpm		
Orbit	3 mm		
Timer	1s—99h59min / continuous		
Noise	<52 db		
Dimensions (mm)	270 x 190 x 170		
Optional Attachments	A) 96 x 0.2ml	B) 24 x 0.5ml	C) 24 x 1.5/2ml

Rockers & Rotators

- Gentle but thorough mixing
- Suits for blood collection tubes and centrifuge tubes
- Tilt angle and speed have been optimally set
- Safe for use in cold rooms and incubators

- Speed real-time display and diminishing time display.
- The bearing is articulated rotating, secure and no wear
- Suitable for prolonged use
- Brushless DC motor, maintenance-free.

Model No.	BT-RH-24	BT-HS-25
Speed Range	20 rpm (fixed)	10 ~ 80 rpm
Tilt Angle	3-D / 20° (fixed)	10°
Timer	-	1min ~ 99h 59min
Platform Size (mm)	236 x 171	280 x 228
Power	110V/220V	

- LED display for time and speed
- DC brushless motor, stable performance, low noise and long using life
- 360° vertical circulation rotation, operating smooth and steady
- Different tube holder frames for optional to suit different types of tubes

- Digital display for time and speed
- DC brushless motor, speed control accuracy, long life and maintenance-free
- Programmable - user can set and save up to 9 user defined programs
- Option for Auto power On in case of power failure - on resumption it will start automatically and run for the remaining time
- Easy removal / installation of disc plates for replacement & cleaning
- 3 plate options: Supplied with any one chosen disc plate

Model No.	BT-VM-80	BT-RM-80
Speed Range	0 ~ 80rpm	10 ~ 80 rpm
Speed Accuracy	+/- 1 rpm	
Gradient Range	360°	0° ~ 90°
Timer	-	1-99 min & infinite
Motor Pattern	Circular	
Voltage	100-240VAC 50/60Hz	24V
Dimension (mm)	470 x 190 x 160	383 x 325 x 325
Optional Accessories	A) 64 x 1.5 ml B) 22 x 15 ml C) 16 x 50 ml	A) 44 x 2 ml B) 24 X 15 ml C) 12 x 50 ml

- Unique combination of adjustable rotating frame
- A variety of rotation modes, from mild type to somersault type rotation mode
- Provide three types of rotating frame

Model No.	BT-RH-18	BT-RH-18+
Rotating Speed	18 rpm	10 ~ 40 rpm
Timer	N/A	1s ~ 999min
Oscillation Angle	N/A	20˚ ~ 99˚
Weight	1 kg	1.2 kg
Power supply	220V/110V	AC100-230V
Dimension	240 x 145 x 210 (mm)	
Attachments Included	A) 2 Units 5 x 10ml /15 ml +6 x 5ml /7 ml B) 2 Units (3 x 50ml +18 x 0.5ml) C) 2 Units (18 x 1.5ml / 2.0ml)	

Orbital Shakers

- LED display time and speed
- Adjustable Speed, Gentle shaking
- Timing function, Beep alarm when operation ends
- Compact and clean designed, streamlined fuselage, simple operation convenient for cleaning
- DC brushless motor, safe, long life and free of maintenance
- Different platforms to adapt different conical flasks and other sample containers for optional choices

Model No.	BT-GS-20
Speed Range	50 ~ 300 rpm
Orbit	20 mm
Timer	1 min ~ 100 hr
Operating Amb. Temp. Range	4 ~ 45°C
Max. Loading Capacity	2.5 kg
Dimension (mm)	284 x 264 x 90
Optional Attachments	**A)** Platform for 12 x 100ml flask **C)** Universal Platform **B)** Platform for 6 x 250ml flask **D)** Platform for Petri Plates

- Touch-screen panel, LED 2-screen digital display
- With digital speed controller and timer
- Shaking smoothly and quietly
- Memory of power cut, uses brushless AC motor
- Choose one set of clamps
- Three-point bearing transmission is adopted suitable for heavy loads and continuous duty

Model No.	BT-TS-520D		BT-TS-560D			BT-TS-580D		
Speed Range	30 ~ 250 rpm							
Orbit	25 mm					50 mm		
Timer	999H/ 999M/ 999S							
Platform Dimension (mm)	400 x 300		600 x 480			960 x 600		
Overall Dimension (mm)	400 x 300 x 220		600 x 480 x 220			960 x 600 x 220		
Optional Attachments	125ml	250ml	500ml	1Ltr.	2Ltr.	3Ltr.	4Ltr.	5Ltr.
BT-TS-520D	20	12	6	4	2	1	1	1
BT-TS-560D	48	30	20	12	8	6	6	4
BT-TS-580D	96	60	40	24	15	15	12	8

- Microprocessor controlled for high accuracy
- A special turn down toggle clamp for spill proof & simple slide in/slide out for loading/unloading of micro-plate
- Universal fit – comes with interchangeable clamps for different micro plates
- USB connectivity for integration/interfacing
- Operate though laptop/computer (remote operation)-save data logs for operations through computer

Model No.	BT-MPS-1	BT-MPS-4
Speed Range	200 ~ 1800 rpm	200 ~ 1200 rpm
No of Plates	1	4
Orbital Diameter	2 mm	3mm (horizontal)
Timer	1 to 180 mins	1 to 999 mins & infinite mode
Power supply	100 to 240V, 50/60 Hz	24V
Dimensions (mm)	127 x 85 x 86	88 x 343 x 195
Pulse Mode	-	yes, Programmable (30 to 90 sec)
Standard Attachments	**A)** 20 x 1.5/2.0 ml Micro tubes (Foam) **B)** Replaceable clamps to use different types of standard Micro plate	Compatible to all standard skirted Micro plates

Magnetic Stirrer (Analog Model)

- Perfect radius and excellent dimensional technology blend with adjustable mixing speed
- High efficient shaking and temperature control, programmable
- Microprocessor controlled and accurate temperature and speed control, small fluctuation
- Various blocks for option, convenient replacement
- Built-in temperature calibration short mixing function
- DC brushless motor drive, long life, free of maintenance
- Multiple safety protection function, conforms to CE safety standards, safe and reliable

Model No.	BT-MTC-100	BT-MTH-100
Temp. Range	0° ~ 100°C	Amb. +5 ~ 100°C
Speed Range	300 ~ 1500 rpm	300 ~ 2000 rpm
Shaking Orbit	3mm (horizontal)	
Heating Time	<20min (20°C ~ 100°C)	
Timer	99h59min	
Temp. Uniformity	≤±0.3°C	
Temp. Accuracy	±0.3°C	
Display Accuracy	0.1°C	
Cooling Time	≤25min from ambient to ambient - 20°C (detect at 30°C of ambient temperature)	–
Cooling Speed	≥7°C /min (From 100°C to 20°C) ≥1.2°C /min (from ambient to ambient - 20°C)	–
Dimension (mm)	270 x 190 x 170	
Optional Blocks	**A)** 96 x 0.2ml PCR plate **E)** 20 x 0.5ml + 15 x 1.5ml **I)** 103 x 67 x 30 mm (water bath block) **B)** 54 x 0.5ml **F)** 24 x dia. ≤ Φ12mm **J)** 12 x 15ml (max. speed to 600rpm) **C)** 35 x 1.5ml **G)** 32 x 0.2ml + 25 x 1.5ml **K)** 6 x 50ml (max. speed to 600rpm) **D)** 35 x 2.0ml **H)** 32 x 0.2ml + 10 x 0.5ml + 15 x 1.5ml	

Micro Plate Thermo Shaker

- LCD display, set and actual temperature display simultaneously, time and shaking speed
- Two-side heating of micro plates that allows achieving exact correspondence of the set and actual temp. in wells of the micro plates
- The microprocessor controls the time and temperature, good linearity, temperature oscillation speed accuracy, small fluctuation
- Alarm signal after operation ends
- Power restore function
- DC brushless motor drive, long service life, free of maintenance

Model No.	BT-ST-70-2	BT-ST-60-4
Capacity	2 plates	4 plates
Temp. Range	Amb. +5~70°C	Amb. +5~70°C
Speed Range	300 ~ 1200 rpm/min	
Temp. Uniformity	≤±0.5°C	
Temp. Accuracy	≤±0.2°C	
Heating Time	25 min (from 20°C to 70°C)	
Timer	0 ~ 99h 59min	
Orbit	3mm (horizontal)	2mm (horizontal)
Power	150W	250W
Dimension (mm)	284 x 264 x 157	345 x 310 x 178

Incubator Shaker

- Rational and compact designed, good temp. uniformity, low noisy
- Micro-processor controls temperature and shaking speed
- Built in timing function & cover switch
- No temp overshoot problem, heating cut off over the set value
- Speed control circuit to ensure smooth starting to avoid liquid spilling
- Independent temperature alarm system
- Alarm when program completes
- Brushless DC motor, long life and maintenance free

Model No.	BT-ES-60
Temp. Range	Amb.+5 ~ 60°C
Speed Range	50 ~ 300 rpm
Orbit	20 mm
Temp. Accuracy	0.1°C
Temp. Uniformity	≤±0.3°C
Timer	0 ~ 99h59min
Dimension (mm)	420 x 360 x 320
Power	AC110V/220V 250W
Optional Platform	A) Platform for 12 x 100 ml flask B) Platform for 6 x 250 ml flask C) Universal Platform D) Platform for Petri Plates E) Flat Platform with non-sleep rubber mat

- Inside material is SUS304 and outside body is powder painting
- Screen-touch panel
- Overheat and over low protector, built-in circulating fan for temperature stability
- With safety switch to stop shaking when opening door
- Transparent glass observation window
- Three-point bearing transmission is adopted suitable for heavy loads and continuous duty
- Shaking smoothly and quietly
- Uses brushless AC motor for long durability and stable performance of the shaking system

Model No.	BT-LM-400D	BT-LM-450D	BT-LM-420D	BT-LM-570D	BT-LM-575D	BT-LM-570RD	BT-LM-575RD
Temp. Range	Amb.+5° ~ 70°C					0° ~ 70°C	
Temp. Accuracy	± 0.1°C						
Orbit	25 mm						
Speed Range	20 ~ 250 rpm		30 ~ 250 rpm	20 ~ 300 rpm	20 ~ 150 rpm	20 ~ 300 rpm	20 ~ 150 rpm
Timer	999h 999min 999sec						
Platform	Single			Double	Single		Double
Dimension (mm)	400 x 300	450 x 450	400 x 300	480 x 380			
Capacity	66 L	102 L	65 L	150L			
Dimension Inner (mm)	455x390x380	500x540x380	450x390x370	600 x 500 x 500			
Dimension Outer (mm)	460x510x540	510x650x540	520x550x610	680 x 690 x 860			
Power	110/220v; 50/60Hz						

Optional Flask Clamps

Model / Flask Capacity	50ml	125ml	250ml	500ml	1Ltr.	2Ltr.	3Ltr.	4Ltr.	5Ltr.
BT-LM-400D	35	20	12	6	4	2	-	-	-
BT-LM-450D	64	36	25	16	9	5	-	-	-
BT-LM-420D	35	20	12	6	4	2	-	-	-
BT-LM-570D/RD	-	48	30	20	12	9	6	6	4
BT-LM-575D/RD	2 x 3	2 x 20	2 x 12	-	-	-	-	-	-

Hand Held Homogenizer

- Can operate in one hand
- Digital display speed
- Adjustable speed and precisely controlled to avoid splashing
- Homogeneous dispersion of a small amount of sample in small container
- High quality stainless steel dispersing head, anti-corrosion
- High temperature resistance for disinfecting
- Easy to take off the dispersing head for cleaning
- High speed and high efficiency motor
- Optional H-type stand, height and angle can be adjusted, convenient to take and store

Model No.	BT-MT-13K	BT-MT-30K
Feature	Fixed Speed	Variable Speed, Digital
Speed Range	13,000 rpm	8000 ~ 35,000 rpm
Digital Display	-	Yes
Rotor Inline Speed	-	6.3-14m/sec
Noise	60dB	72dB
Power Supply	230V / 50Hz	
Dimension (mm)	25 x 25 x 160	46 x 55 x 230

Model No.	Optional Accessories
BT-MT-30K	A) Head for 0.5-50 ml
	B) Head for 1-100 ml
	C) Head for 1-250 ml
	D) H type Stand

Spectrophotometer

UV-Visible (Single Beam)

- High wavelength Precision; highly accurate & stable
- ABS for the accurate measurement of the value & C Figures show measured values, four of LCD
- Durable materials deuterium lamp tungsten lamp
- A key value of automatic calibration ABS
- Rs232 interface for the computer and printer

- Auto wavelength setting & calibration
- Can display & save 50 groups of data, 5 groups per screen
- Data can be restored after sudden power cut
- Tungsten & deuterium lamp can be turned ON & OFF individually to extend lifetime
- Rs232 interface for the computer and printer

Model No.	BT-UVS-SB-E	BT-UVS-SBA-E
Wavelength Range	195 ~ 1000 nm	190 ~ 1000 nm
Wavelength Accuracy	±5 nm	± 1 nm
Photometric Range	0 ~ 200%T, -0.301 ~ 2.000A, 0 ~ 1999C	-0.3 ~ 3.5, 0 ~ 220% T
Stray Light	< 0.3%T @ 220nm, 360nm	< 0.3% T
Spectral Bandwidth	2 nm	
Key Board	4 Keys, Soft touch membrane type	
Serial Interface	RS 232C interface	USB Port & Parallel port for printer
Light Source	Philip halogen, Deuterium lamp (2000h)	Tungsten and Deuterium lamp
Detector	Silicon Photodiode	
Optics	Single Beam optics with resolution1200 grooves/mm grating	
Sample Holder	4 position adjustable sample holder	
Power	AC 230V + 10%, 50Hz	

UV-Visible (Double Beam)

- Wide wavelength range
- Automatic changeover between W & D2 lamp
- Rich measurement method: wavelength scan, time scan, multi-wave length determination and multi order derivative determination etc. meet different measurement requirements

Model No.	BT-UVS-DBS-E	BT-UVS-DB8-E
No. of Cell Holders	Double cells	Eight cells
Optical System	Double Beam (1200 Lines/mm Grating)	
Wavelength Range	190 ~ 1100 nm	
Mode	Basic/Quantitative/Wavelength Scan/DNA, Protein Test/Kinetic	
Scanning Speed	Fast / Medium / Low	
Band Width	1 nm	
Wavelength Accuracy	± 0.3 nm	
Wavelength Repeatability	0.2 nm	
Photometric Accuracy	± 0.3 %T	
Photometric Repeatability	0.2 %T	
Photometric Display Range	0 ~ 200 % T, -0.3 ~ 3.0 A, 0 ~ 9999 C	
Stability	0.001 A/h @ 500 nm	
Baseline Flatness	±0.001 A	
Stray Light	< 0.05 % T @ 220 nm, 360 nm	
Data Output Port	USB	
Printer Port	Parallel Port	
Display	Graphic LCD (320 x 240 Dots)	
Lamps	Deuterium Lamp & Tungsten Halogen Lamp	
Detector	Silicon Photodiodes	

μSpectrophotometer

- Measures DNA, RNA (A260) and Protein (A280), concentrations and sample purity (260/280 ratio)
- Large concentration range without dilutions
- Direct, easy measurements in less than 5 seconds: just pipette & wipe
- Full spectral output
- User-friendly software that includes Custom Methods and data export capabilities
- Low-cost operation--no plates or other consumables

Model No.	BT-Nano-100
Wavelength Range	200 ~ 800nm
Minimum Sample Size	0.5 ~ 2µl
Detection Limits	2 ~ 4500ng/ul (dsDNA)
Path Length	0.2mm (For high concentration measurement), 1.0mm (For ordinary)
Light Source	Xenon flash lamp
Detector Type	3864-element linear silicon CCD array
Wavelength Accuracy	1nm
Spectral Resolution	≤ 3 nm (FWHM at Hg 546 nm)
Absorbance Precision	0.003 Abs
Absorbance Accuracy	1% (7.332Abs at 260 nm)
Absorbance Range	0.02 ~ 90A
Measurement Time	< 8s
Sample Pedestal Material	Aluminum alloy and Quartz fiber
Operating Voltage	24V DC
Operating Power Consumption	12 - 18 W
Standby Power Consumption	5W
Software Compatibility	Windows XP, Windows 10 64bit
Dimensions (mm)	200 x 250 x 166

ELISA Reader & Washer

- Robust system with built-in stabilizer, shaker with variable speed & duration
- Option to run multiple blank in Cut-Off mode
- Bichromatic readings ability from any strip in a single plate and extensive curve plotting
- Unique circuitry for long life of lamp
- Results printing in matrix mode format
- Facility to enter clinic name

Model No.	BT-PR1-E
Human Machine Interface	Touch Panel / Keypad
Linear Measurement Range	0.000 to 3.500 Abs
Photometric Accuracy	± 2% or 0.007 whichever is higher, from 0 to 1.5 A; ± 3% from 1.5 A to 3.5 A
Drift	<0.005 A/hr
Photometric Linearity	2.5 A
Optical measurement	8 Channel
Filters	Narrow band Interference 405nm, 450nm, 492nm, 630nm, & Four Optional
Half Bandwidth Selection	10nm ± 2nm Automatic by Stepper Motor
Light Source	Tungsten halogen lamp, 20 Watts
Display	6" Graphics LCD, Negative Blue
Curve Plotting	STN Graphical Representation on Printer
Plate Carrier Movement	Precisely through the stepper motor
Printer	Built in Thermal Printer 52 columns
Memory	Battery back up for 250 tests and more than 2500 results
Analysis Mode	Abs (Normal & Differential) Cut – off Multi – Standard % Abs Single Standard
Connectivity	RS232 Serial Port/USB
Operation Position	On horizontal flat, rigid and vibration free surface
Operating Temp./Humidity	From + 18˚ C to 35˚C; Up to 80%
Storage Temp./ Humidity	From - 10˚ C to 40˚C; Up to 80%
Enclosure	ABS Fire Retardant
Dimensions (mm)	360 x 360 x 220
Power Wattage, Voltage	75 Watts, 115 – 230 Volts ± 10%, 50 / 60 Hz

- Removable Manifold assembly to prevent any scratching on bottom of well
- User programmable soak time, wash cycles and dispensing volume
- On Board two plate incubator at 37˚C with programmable timer
- Waste bottle full warning with audible alarm
- Built-in stabilizer
- Continuous aspiration to prevent overflow

Model No.	BT-PW1-E
Manifold	8 Way Manifold Autoclavable
Dispensing Method Volume	Peristaltic Pump 50 - 500 µl
Aspirating Method	Continuous through diaphragm pump while dispensing hence preventing overflow
Residual Volume	< 2 µl
Display	16 digit alphanumeric fluorescent
Memory	8 KB Non volatile RAM Battery backup, supporting 35 Open channels
Programming Modes	Plate, Strip, Bottom & Overflow Wash, Rinsing, Priming, Disinfect
Shaking Time Speed	1 to 59 Seconds; 8 Steps
Incubator	For two ELISA Plates, 37˚C
Timer	Individually Programmable 2 Nos.
Operating Position	On horizontal, rigid, flat and vibration free surface
Operating Temp./ Humidity	+18˚ C to 35˚C; Up to 85 %
Storage Temp./ Humidity	- 10˚ C to 60˚C; Up to 85 %
Enclosure	ABS Fire retardant
Liquid contact materials	Silicon, stainless steel, derline
Dimension (mm)	350 X 350 X 130
Power	50 Watts; 115-240 Volts ± 10%, 50 /60 Hz

Micro-Pipette (Single-Channel)

- Calibration as per the standard of EN ISO 8655 for ensured accuracy & precision
- Calibration report enclosed with every pipette
- Click – Stop digital system for volume setting
- Color coded for easy identification

Model No.	Volume Range [µl]	Increments [µl]	Test Volume [µl]	% Inaccuracy (±)	% Imprecision (±)
BT-MP10-E	0.5 - 10	0.1	1	2.5	1.5
			10	1.0	0.8
BT-MP100-E	10 - 100	0.5	10	3.0	1.5
			100	0.8	0.15
BT-MP1000-E	100 - 1000	5	100	2.0	0.7
			1000	0.6	0.2
BT-MP2-E	0.1 – 2.5	0.1	0.5	2.5	1.5
			2.5	1.0	0.8
BT-MP20-E	2 - 20	0.1	2	2.0	0.8
			20	1.8	0.6
BT-MP200-E	20 - 200	1	20	0.6	0.6
			200	0.5	0.15
BT-MP5000-E	1000 - 5000	50.0	1000	0.7	0.3
			5000	0.5	0.15

Micro-Pipette (MultiChannel)

- Soft force / effortless tip loading and ejection
- Easily removable & fully autoclavable manifold
- A 360° rotatable manifold ensures easy right or left hand operation
- One hand tip ejection

Model No.	Volume Range [µl]	Increments [µl]	Test Volume[µl]	% Inaccuracy (±)	% Imprecision (±)
BT-8CH10-E	0.5 - 10	0.1	1	3.5	3.5
BT-12CH10-E			10	1.5	1.5
BT-8CH100-E	10 – 100	0.5	5	3.0	2.0
BT-12CH100-E			25	1.5	1.0
BT-8CH300-E	30 – 100	1	30	1.5	0.7
BT-12CH300-E			300	0.8	0.2

Pipette Controller

- Can fill 25 ml pipette under 4 seconds
- Double Safety valves & filters provide protection against fluid penetration
- Two different speed modes – High & Low along with Gravity drain
- The pump speed can be fine-tuned by varying finger pressure on operating knob to improve the sensitivity and for better control in low volume
- Cadmium Free environment friendly NiMH battery
- Batteries can be changed very easily by user
- Intelligent charger prevents over charging / heating of batteries, with low batteries, with low battery indicator

Model No.	BT-PC-E
Volumetric Range	Plastic / Glass pipette from 0.1 ml up to 200ml
Battery Service Life	Eight hours continuous use
Battery Charging Time	2 – 3 hours to charged fully
Safety System	Replaceable hydrophobic 0.45µm PTFE filter & Safety check valve
Standard Accessories	Battery Charger, Desktop Stand, Hydrophobic PTFE filter 0.45µm (2 pcs.), Hydrophobic PTFE filter 0.20pm (1 pc.) & Wall Mounting Stand

Precision Balance

- LCD with backlight
- Response in 3 seconds
- Linear calibration
- Selectable weighing units & count mode

Model No.	BT-PB-310	BT-PB-610	BT-PB-1010	BT-PB-2202	BT-PB-3202	BT-PB-4202
Capacity	300 g	600 g	1000 g	2200 g	3200 g	4200 g
Readability	0.01 g					
Pan Size (mm)	130 Ø			180 Ø		
Response Time	< 3 sec.					
Display	Backlit LCD Display					
Calibration	Single Key with external weights.					
Units of Measure	gm, ct, lb, oz					

Model No.	BT-PB-63	BT-PB-103	BT-PB-203	BT-PB-303	BT-PB-323	BT-PB-423	BT-PB-523
Capacity	60 g	100 g	200 g	300 g	320 g	420 g	520 g
Readability	0.001 g						
Repeatability	0.002 g	0.002 g	0.003 g	0.003 g	0.002 g	0.002 g	0.003 g
Linearity	0.002 g	0.002 g	0.002 g	0.003 g	0.002 g	0.002 g	0.002 g
Pan Size (mm)	80 Ø				110 Ø		
Response Time	< 3 sec.						
Display	Backlit LCD Display						
Calibration	Single Key with external weights.						
Units of Measure	gm, ct, lb, oz						
Application Mode	Weighing, Parts Counting						
Power	External Adapter, 100-120VAC 150mA, 220-240VAC 100mA, 50/60 Hz						

Analytical Balance

- ATA balance with internal calibration and GMP-GLP record print-out
- Brilliant backlit LCD display with simple navigation windows and menus to guide you through balance function
- User selectable filter, stability indicator and auto-zero tracking for use in difficult environments
- Easy Access, Frameless Draught shield with Removable Doors
- RS232C and USB connectors to connect with PC

Model	BT-AB-24	BT-AB-124EC	BT-AB-224EC	BT-AB-100AC	BT- AB-220AC	BT-AB-300AC
Capacity	20 g	120 g	220 g	120 g	220 g	320 g
Readability	0.1 mg					
Repeatability	0.3 mg	0.2 mg				
Linearity	0.4 mg	0.2 mg				
Pan Size (Ø)	45 mm	90 mm				
Response Time	< 3sec	< 5sec		< 5 ~ 8sec		
Calibration	Single Key with external weights			Auto		
Display	Backlit LCD Display					
Units of Measure	Milligram, Gram, Carat, Ounce, Ounce Troy, Grain					

pH Meter

- Bench top Multi-parameter digital pH Meter
- High accurate, can test pH, ORP and temperature
- 2 point calibration
- With replaceable pH electrode
- Automatic temperature compensation
- Automatic & easy calibration
- large LCD screen
- Simultaneous display of pH and temp
- Slope accuracy is ≥92%
- Easily adjustable electrode stand

- Multi-display on big LCD screen
- Automatic buffer recognition to avoid errors during calibration
- Maximum 5 point calibration
- Hold function to freeze the records
- Reliable probe with temperature compensation
- Automatic(NIST Standard) and manual calibration
- Convenient to view calibration information of probe
- Replaceable pH electrode
- "Ready" icon on LCD to indicate whether reading on machine is stable or not
- 99 memories with real time stamp & could be downloaded to PC using RS232 output for analysis
- Automatic or manual temperature compensation allowed
- Analog output for chart recorders
- Ability to wash single strip of 8 wells
- Auto detection of bottom of well and collision prevention

Model No.	BT-PHS-550	BT-86502
pH Range	0.00 ~ 14.00	
pH Accuracy	±0.01	+/-0.02
pH Resolution	0.01	
mV Range	±1999 mV	
mV Accuracy	±1 mV	±0.2 mV
mV Resolution	1mV	+/-0.1mV
Temperature Range	0 ~ 100°C	0 ~ 80°C
Temperature Accuracy	±1°C	+/-0.5°C
Temperature Resolution	±1°C	0.1°C
Calibration	2 Point	5 Point
Operating Temp & RH	5~60°C, RH≤85%	0°C ~ 50°C, RH <80%
Power	9V	
Dimension(mm)	310 x 250 x 187	317 x 168 x 58
Accessories Included	E201-C plastic case PH combination electrode (Temperature of solution 5-60°C be suitable)/ PH sample standard solution/ Adapter	Meter/ Manual/ Probe/ Solution/ Cable / Software CD / Probe stand

Automated Colony Counter

A compact cabinet has a trans-illuminated platform to illuminate petri dishes from below. Also, provided standard is a lighting system to illuminate the petri dishes from top. Illumination is flicker-free and uniform across complete field-of-view. A colour camera with high-quality optics and superior resolution is built inside. The camera is fully controllable from the touch screen or an external PC or laptop.

- Compact design - occupies just 30 x 30cm of lab space
- High resolution - 12 megapixels, gives sharp images
- Selectable light sources – epi (reflected) and transmitted LEDs
- Click and count plates up to 150mm (6") in diameterin < 1 minutes
- Fast, automatic, repeatable and accurate counting for high throughput labs
- Control camera, change shutter speed, focus and other parameters controls from PC
- Split, add, delete colonies by touch
- Generate comprehensive analysis reports for publication
- Standard lighting modes are - Darkfield, Epi-illumination, Transillumination, Epi+Trans illumination

Model No.	BT-CC-1TS	BT-CC-1PC
Interface	Touch Screen	PC/Laptop
Effective Pixels	12.2 MP	
Bit Depth	8-bit Gray, 24-bit RGB	
Grayscale Levels	256	
Sensor Temperature	Ambient	
Transillumination Standard	12 W, HB LEDs	
Epi Illumination Standard	18 W, HB LEDs	
Capture Software	Yes	
Analysis Software	Yes	

- Designed for fast & accurate counting of bacterial colonies
- Designed with adopting CMOS molectron & LED digitron display
- Bright-white LED light source
- Energy-saving; Non-glare illumination
- Audible count confirmation
- Compatible with wide range of Petri Dish

Model No.	BT-CC-300	BT-CC-400
Plate Size	90mm	60~150mm
Magnification	5 ~ 10x	2 ~ 3x
Counter	4 Digit LED display; 0~9999	
Dimension (cm)	31 x 21 x 8	40 x 30 x 30
Weight	2.5kg	3.8 kg

- Simultaneously mark and counts bacterial colonies
- Oil & water-resistant felt-tip marker works on plastic and glass dishes
- Audible signal for confirmation
- 4-digit LCD display
- Selector switch lets you count up or down to verify totals
- Counter includes two markers (red & black) and one 3V battery

Liquid Nitrogen Containers

- Double wall vacuum and super insulation provides long term storage of liquid nitrogen
- Ultra low temperature preservation of Biological Samples
- Has convenient holding time & capacity
- Rugged, reliable, efficient & economical in operation with long life
- High strength aluminum alloy provides sturdiness yet is light weight

Model	Storage			Portable				Transport	
Model No.	BT-LNC-20	BT-LNC-35	BT-LNC-45	BT-LNC-2	BT-LNC-3	BT-LNC-7	BT-LNC-10	BT-LNC-30	BT-LNC-50
Capacity (Ltrs.)	20.5	34	47	1.75	3.9	7.8	10.5	31.3	50
Static Evaporation Loss Rate (Ltrs/Day)	0.097	0.118	0.37	0.08	0.135	0.114	0.117	0.28	0.43
Static Hold Time (days)	211	282	127	21	29	28	90	112	116
Working time (days)	132	180	79	13	18	72	56	-	-
Total Height (in/mm)	27.4 / 695	28 / 710	27.2/ 690	15.4/ 390	15.9/ 473	19.5/ 495	22.4/ 570	22/ 560	29.1/ 740
Overall diameter (in/mm)	15/ 380	17/ 432	19.1/ 485	6.0/ 16	8.9/225	10.2/ 260	10.2/ 260	17/ 433	
Neck Tube diameter (in/mm)	2/ 51		4.7/120	1.4/ 34.5	2/ 51				
No. of Canisters (pcs)	6		11	5	6			-	-
Empty weight (kg)	10.9	14.5	17.5	4	6	9.7	5	11.3	14.8
Full weight (kg)	27.5	42	55.5	7.1	13	23.6	13.5	36.6	55.2
Canister OD (in/mm)	1.5/38		2.8/ 72	1/ 25	1.5/ 38			-	-
Canister Height (in/mm)	4.7/ 120; 11 / 280		11/ 280	4.7 / 120				-	-
Straw Holding Capacity (pcs) Single Level 0.25ml 0.5ml	1560 720		-	600 290	1560 720			-	-
Straw Holding Capacity (pcs) Single Level 0.25ml 0.5ml	3120 1440		18000 8000	-	-	-	3120 1440	-	-

Plast|cles

Plastic Laboratory Essentials & Supplies

All the products mentioned in the catalogue are manufactured in USA under the Brand name BTLAB.

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