

THERMAL CYCLER



Iris Thermal cycler is a laboratory instrument used in PCR as well as gene cloning application, processing DNA for sequencing, detecting the presence or absence of a gene to help identify pathogens during infection, and generating forensic DNA profiles from tiny samples of DNA. Offers a choice of an advanced thermal cycler, touch thermal cycler, real-time PCR thermal cycler to encounter different kinds of PCR methods.

We brought gradient and non-gradient thermal cycler. Designed with holes that holding the PCR tubes with the reaction mixture. Can change the parameters by increasing and decreasing the temperature of the block during pre-programming stages. Developed to meet the highest standards in reliability, precision and block uniformity in the long term. The use of these instruments guarantees accurate and consistent results. All instruments come with a 7-inch color touch screen and an easy-to-use software interface. Its features include the combination of ultra-fast heating and cooling rates, the wide range of exchangeable block modules and the professional user management system.

- Thermal Cyclers
- Real-Time PCR System
- Nucleic Acid Purification

All instruments come with a 7-inch color touch screen and an easy-to-use software interface. Its features include the combination of ultra-fast heating and cooling rates, the wide range of exchangeable block modules and the professional user management system.

- Q Series Thermal Cyclers
- Gradient Thermal Cyclers
- Multi-Block Thermal Cyclers
- Advanced Thermal Cyclers

Q SERIES THERMAL CYCLERS

Q SERIES THERMAL CYCLERS

Q Series Laboratory Thermal Cycler is furnished with an integral 8-inch color touch screen, which continually monitor and controls every aspect of the performance of the machine. It utilizes 6 Peltier's and 3 temperature zones for precise sample control using drive technology and active control algorithms which ensure temperatures are perfectly executed in every sample.

qLab Thermal Cyclers ITCL-1000 Series designed with a 96-well block, with the availability of a gradient function. The most popular block dual 96/96 well block is capable of holding up to 96×0.2 ml tubes on either side along with 77×0.5 ml, 60×0.5 ml and 384 well, with each side acting as its own independent thermal cycler, with a programmable thermal gradient for optimizing annealing or denaturing temperatures. The combination of excellent technical data and an attractive price makes it the right choice for many research and routine laboratories

qGene Thermal Cyclers ITCL-2000 has been used in PCR applications in research and development, food science, pharmaceuticals, life science, animal diagnostics, and analytical laboratories. Features with Marlow Peltier heating units with Operating windows come with 5 inch LCD 800×480 pixels, 65K vibrant touch display with quicker ramp rates allow more work to be done in a workday.

Q SERIES THERMAL CYCLERS

QLAB THERMAL CYCLERS ITCL-1000 SERIES



qLab Thermal Cyclers ITCL-1000 Series designed with a 96-well block, with the availability of a gradient function. The most popular block dual 96/96 well block is capable of holding up to 96×0.2 ml tubes on either side along with 77×0.5 ml, 60×0.5 ml and 384 well, with each side acting as its own independent thermal cycler, with a programmable thermal gradient for optimizing annealing or denaturing temperatures. The combination of excellent technical data and an attractive price makes it the right choice for many research and routine laboratories.

qLab Thermal Cyclers ITCL-1000 accommodates 96×0.2 ml, 96×0.2 ml+77×0.5 ml, 60×0.5 ml, and 384 well and this block are completely independently of each other and without interference. Fabricated with anodizing technology that has prompt heating conducting and adequate corrosion resistance property.

Features

- Quicker ramp rates allow more work to be done in a workday
- Simple to program unit is compact in design and built to perform
- Programming is in-built with large display and multiple pre-programmed templates supplied with the unit
- Peltier heating units with 6 long service life and form 3 circuits to control 3 temperature zones
- Equipped with Built-in 11 standard program file template for rapidly and accurate necessary files
- Throughout the program, it allows to edit files and showed the remaining time and running program in real-time
- Support USB device with enormous storage capability, 10000 typical PCR files in free configurable folders and LAN for software updating also compatible with devices like mouse and keyboard
- Meet the requirement of denaturation, enzyme cutting/enzyme link, and ELISA
- Operating windows comes with 8" (800×600, 16 colors) TFT vibrant touch graphical display
- Accurate data support and result from analysis record in GLP
- Automatic restart mode and run the unfinished program after power failure
- Meet the need for another testing hot lid temperature and hot lid work mode available
- Assure password and data security along with user login management and three-tier permission
- Connect numerous sets of PCR by single PC controlled
- Email-alert function at the end of the experiment
- To avoid vaporization and melting tubes are fits at different height by a step-less adjustable hot lid with pressure-protection
- Bluetooth printer (option)

Technical Specifications

Model	ITCL-1100	ITCL-1200	ITCL-1300	ITCL-1400
Capacity	96×0.2 ml	96×0.2 ml +77×0.5 ml	60×0.5 ml	384 well
Display	LCD, 8 inch, 800×600 pixels,			
Temperature Range	0 to 100°C			
Number of Program	10000 +(USB FLASH)			
Uniformity	≤ ± 0.2°C			
Accuracy	≤ ± 0.1°C			
Resolution	0.1°C			
Number of Cycle	100			
Number of Step	30			
Holding Temperature	4°C			
Temperature Control	Block\Tube			
Heating Rate	4.5°C/S			
Cooling Rate	4°C/S			
Ramping Rate Adjustable	0.1 to 4.5°C			
Gradient Temp. Range	30 to 100°C			
Gradient Uniformity	≤±0.2°C			
Gradient Accuracy	≤±0.2°C			
Gradient Spread	1 to 30°C			
Hot Lid Height Adjustable	Step less Adjustable			
Hot Lid Temperature	30 to 110°C			
Connectivity	USB 2.0, LAN			
Temp Increment/Decrement	0.1 to 10.0°C			
Increase/Decrease in Time	1 Sec to 600 Sec			
Power consumption	600 W			
Overall Dimensions	390×270×255 mm			
Net Weight	8.5 kg			
Electrical Requirements	AC 85 to 264 V/47, 63 Hz			
Catalogue No.	620050503	620051003	620051503	620052003

Q GENE THERMAL CYCLERS ITCL-2000 SERIES



qGene Thermal Cyclers ITCL-2000 Series has been used in PCR applications in research and development, food science, pharmaceuticals, life science, animal diagnostics, and analytical laboratories. Features with Marlow Peltier heating units with Operating windows come with 5 inch LCD 800×480 pixels, 65K vibrant touch display with quicker ramp rates allow more work to be done in a workday.

qGene Thermal Cyclers ITCL-2040

Iris qGene Thermal Cyclers ITCL-2040 has features with Marlow Peltier heating units with a touch LCD display and 0.2 ml single tube along with holding capacity up to 16×0.2 ml(4×4 layout) and maximum ramping rate 5°C/s and power consumption 120 W. Support USB device with enormous storage capacity. Fabricated with anodizing technology that has prompt heating conducting and adequate corrosion resistance property and the scalable hot lid fits tubes of different altitudes.

qGene Thermal Cyclers ITCL-2080

Iris qGene Thermal Cyclers ITCL-2080 has features with Marlow Peltier heating units with a touch LCD display and 0.2 ml single tube, 8 strips along with holding capacity up to 32×0.2 ml(4×8 layout) and maximum ramping rate 5 /s and power consumption 200 W. Support USB device with enormous storage capacity. Fabricated with anodizing technology that has prompt heating conducting and adequate corrosion resistance property and the scalable hot lid fits tubes of different altitudes.

Features

- Manufactured with Marlow Peltier heating units and maximum ramping rate up to 5°C/s
- Equipped with Built-in 11 standard program file template for rapidly and accurate necessary files
- Simple to program unit is compact in design and built to perform
- Programming is in-built with large display and multiple pre-programmed templates supplied with the unit
- The scalable hot lid fits tubes of different altitudes
- Support USB device with enormous storage capability, 10000 typical PCR files in free configurable folders and LAN for software updating also compatible with devices like mouse and keyboard
- Meet the requirement of denaturation, enzyme cutting/enzyme link, and ELISA
- Accurate data support and result from analysis record in GLP
- Automatic restart mode and run the unfinished program after power failure
- Meet the need for another testing hot lid temperature and hot lid work mode available
- Bluetooth printer (option)
- Assure password and data security along with user login management and three-tier permission
- Throughout the program, it allows to edit files and showed the remaining time and running program in real-time.
- Connect numerous sets of PCR by single PC controlled
- Email-alert function at the end of the experiment
- To avoid vaporization and melting tubes are fits at different height by a step-less adjustable hot lid with pressure-protection
- Support English language
- Fully adjustable heated lid

Technical Specifications

Model	ITCL-2040	ITCL-2080
Capacity	16×0.2 ml(4×4 layout)	32×0.2 ml(4×8 layout)
Tube	0.2 ml single tube	0.2 ml single tube, 8 strip
Display	LCD 5 inch, 800×480 pixels, 65K colour	
Temperature Range	4 to 100°C	
Number of Program	10000 +(USB FLASH)	
Uniformity	≤±0.2°C	
Accuracy	≤±0.2°C	
Resolution	0.1°C	
Number of Cycle	100	
Number of Step	30	
Holding Temperature	4°C	
Temperature Control	Block/Tube	
Heating Rate	5°C/s	
Cooling Rate	4°C/s	
Ramping Rate Adjustable	0.1 to 5°C	
Gradient Temp. Range	-	30 to 100°C
Gradient Spread	-	1 to 30°C
Hot Lid Temperature	30 to 110°C	
Connectivity	USB2.0 , WIFI	
Increase/Decrease in Temperature	0.1 to 10.0°C	
Increase/Decrease in Time	1 Sec to 600 Sec	
Power consumption	120 W	200 W
Dimension	267×190×115 mm	
Weight	3 kg	3.2 kg
Electrical Requirements	AC 85 to 264 V/47, 63 Hz	
Catalogue No.	620100503	620101003

GRADIENT THERMAL CYCLERS

GRADIENT THERMAL CYCLERS

Gradient Thermal Cyclers offer 3 important dynamics to reflect when choosing a laboratory instrument are accuracy, consistency, and reproducibility. Accuracy for accurate results, consistency for trusting your product can perform as needed, and reproducibility to assure experiments are handled in a suitable conditions. Supply high performance and maximum flexibility with an ability to promote a base model to gradient capability with available with a different choice of thermal cyclers blocks: 96×0.2 ml, 96×0.2 ml + 77×0.5 ml, 54×0.5 ml, and 384 well.

Gradient Thermal Cyclers ITCG-1000 Series offers superior performance and a large color touch screen for easy programming. This fully modular platform is able to accommodate different throughput needs with easily interchangeable reaction modules that swap in seconds without tools. Each PCR module has a fully adjustable heated lid that supports a wide range of vessels and sealers, including low-profile and standard-height PCR plates.

Gradient Thermal Cyclers ITCG-2000 Series has been used in Clinical detection in hospital, professional, expert. Accommodates 2 different wells including 96×0.2 ml, adaptive to 8-well strip PCR tubes and 96-well plates and this block is completely independently of each other and without interference. Fabricated for easy-to-use, compressed, and accurate thermal cyclers to fit every necessary PCR workflow.

Gradient Thermal Cyclers ITCG-3000 Series has been used in PCR applications in research and development, food science, pharmaceuticals, life science, animal diagnostics, and analytical laboratories. Features with Peltier heating units, control 6 temperature zones with vibrant touch LCD display along with holding capacity up to 96×0.2ml (6 independent 16 well blocks) and maximum ramping rate 6°C/s and advanced technologies with WINCE system.

GRADIENT THERMAL CYCLERS

GRADIENT THERMAL CYCLERS ITCG-1000 SERIES



Gradient Thermal Cyclers ITCG-1000 offers superior performance and a large color touch screen for easy programming. This fully modular platform is able to accommodate different throughput needs with easily interchangeable reaction modules that swap in seconds without tools. Each PCR module has a fully adjustable heated lid that supports a wide range of vessels and sealers, including low-profile and standard-height PCR plates.

Gradient Thermal Cyclers ITCG-1000 accommodates 96×0.2 ml, 96×0.2 ml+77×0.5 ml, 54×0.5 ml, 384 well, and this block are completely independently of each other and without interference. Standard Marlow Peltier along with graphical LCD display and responsive color touch screen shortens device processes with an easy to read interface and maximum ramping rate 0.1 to 4.5°C. Semiconductor based technology using advanced Peltier heating units with 6 long service life.

Features

- Quicker ramp rates allow more work to be done in a workday
- Simple to program unit is compact in design and built to perform
- Programming is in-built with large display and multiple pre-programmed templates supplied with the unit
- Large LCD graphical display along with GUI
- Data protection
- Fabricated with the metal shell
- Movable lid with a different angle
- Assurance of stability and reliability of test perform under high sealing reaction zone
- The hot lid is step-less adjustable
- Fully adjustable heated lid

Technical Specifications

Model	ITCG-1010	ITCG-1110	ITCG-1210	ITCG-1310	ITCG-1410	ITCG-1510	ITCG-1610	ITCG-1710
Capacity	96×0.2 ml		96×0.2 ml + 77×0.5 ml		54×0.5 ml		384 well	
Display	LCD, Graphical, 5.7 inch, <small>320×240 pixels</small>							
Temperature Range	0 to 99.9°C							
Number of Programs	200							
Uniformity	≤±0.3°C							
Accuracy	≤±0.2°C							
Resolution	0.1°C							
Number of Cycle	99							
Number of Step	9							
Holding Temperature	4°C							
Temperature Control	Block/Tube							
Heating Rate	4.5°C ^{⁻¹}							
Cooling Rate	4°C ^{⁻¹}							
Ramping Rate Adjustable	0.1 to 4.5°C							
Gradient Temp. Range	-	30 to 99.9°C	-	30 to 99.9°C	-	30 to 99.9°C	-	30 to 99.9°C
Gradient Uniformity	-	≤±0.3°C	-	≤±0.3°C	-	≤±0.3°C	-	≤±0.3°C
Gradient Accuracy	-	≤±0.2°C	-	≤±0.2°C	-	≤±0.2°C	-	≤±0.2°C
Gradient Spread	-	1 to 30°C	-	1 to 30°C	-	1 to 30°C	-	1 to 30°C
Hot Lid Height Adjustable	Step less Adjustable							
Hot Lid Temperature	30 to 110°C							
Increase/Decrease in Time	0.1 to 9.9°C							
Power consumption	600 W							
Overall Dimensions	392×262×252 mm							
Net Weight	10 kg							
Electrical Requirements	264 VAC, 50 to 60 Hz							
Catalogue No.	620150503	620151003	620151503	620152003	620152503	620153003	620153503	620154003

GRADIENT THERMAL CYCLERS ITCG-2000



Gradient Thermal Cyclers ITCG-2000 has been used in Clinical detection in hospital, professional, expert. Accommodates 2 different wells including 96×0.2 ml, adaptive to 8-well strip PCR tubes and 96-well plates and this block is completely independently of each other and without interference. Fabricated for easy-to-use, compressed, and accurate thermal cyclers to fit every necessary PCR workflow.

Features

- Operating windows comes with 8 inches TFT vibrant touch graphical display and WinCE
- Compatible with mouse connection with smart touch control as well as access to LAN
- Quicker ramp rates allow more work to be done on a workday
- Simple to program unit is compact in design and built to perform
- Bluetooth printer for easy operation
- Meet the need for another testing hot lid temperature and hot lid work mode available
- 4 Temperature Control modules
- Great reproducibility of PCR reaction
- Achieve traceability of experimental result
- Portable and User-friendly
- Faster speeds
- No condensation after overnight cooling at $\geq 4^{\circ}\text{C}$

Technical Specifications

Model	ITCG-2000
Capacity	96×0.2 ml, adaptive to 8-well strip PCR tubes and 96-well plates
Display	8 inch TFT
Temperature Range	4 to 100°C
Program Memory	10000+(USB Flash)
Temperature Control Pattern	Semiconductor TE
HOT lid	Electronic
Number of Cycle	100
Number of Step	30
Temperature Control	4
Temperature Adjustable Rate	0.1 to 5°C
Temperature Uniformity	± 0.2°C
Temperature Accuracy	± 0.1°C
Temperature Gradient Range	1 to 30°C
Hot Lid Temperature	30 to 110°C
Heating Rate	≥5°C
Cooling Rate	≥4°C
Operating System	WinCE
Connectivity	USB 2.0
Dimensions	380×240×260 mm
Weight	8.5 kg
Electrical Requirements	AC100 to 264 V/50Hz, 66 Hz
Catalogue No.	620200503

GRADIENT THERMAL CYCLERS ITCG-3000



Gradient Thermal Cyclers ITCG-3000 has been used in PCR applications in research and development, food science, pharmaceuticals, life science, animal diagnostics, and analytical laboratories. Features with Peltier heating units, control 6 temperature zones with vibrant touch LCD display along with holding capacity up to 96×0.2ml (6 independent 16 well blocks) and maximum ramping rate 6°C/s and advanced technologies with WINCE system.

Features

- Peltier heating units with 6 long service life, control 6 temperature zones
- Quicker ramp rates allow more work to be done on a workday
- Simple to program unit is compact in design and built to perform
- Programming is in-built with large display and multiple pre-programmed templates supplied with the unit
- Equipped with Built-in 11 standard program file template for rapidly and accurate necessary files
- Advanced technologies with WINCE system
- Throughout the program, it allows to edit files and showed the remaining time and running program in real-time
- Support USB device with enormous storage capability, 10000 typical PCR files in free configurable folders and LAN for software updating also compatible with devices like mouse and keyboard
- Meet the requirement of denaturation, enzyme cutting/enzyme link, and ELISA
- Operating windows comes with 8" (800×600, 16 colors) TFT vibrant touch graphical display
- Portable and User-friendly
- Accurate data support and result from analysis record in GLP
- Automatic restart mode and run the unfinished program after power failure
- Meet the need for another testing hot lid temperature and hot lid work mode available
- Bluetooth printer (option)
- Assure password and data security along with user login management and three-tier permission
- Connect numerous sets of PCR by single PC controlled

Technical Specifications

Model	ITCG-3000
Capacity	96×0.2 ml (6 independent 16 well block)
Display	LCD, 8 inch, 800×600 Pixels, TFT
Temperature Range	4 to 100°C
Number of Program	10000 +(USB FLASH)
Uniformity	≤± 0.3°C
Accuracy	≤± 0.2°C
Resolution	0.1°C
Number of Cycle	100
Number of Step	30
Holding Temperature	4°C
Temperature Control	Block\Tube
Heating Rate	6°C/s
Cooling Rate	4°C/s
Ramping Rate Adjustable	0.1 to 6°C
Gradient Temp. Range	30 to 100°C
Gradient Spread	Temperature difference of adjacent temperature zone: 0.1 to 5°C, 6- Temperature zones
Hot Lid Height Adjustable	Step less Adjustable
Hot Lid Temperature	30 to 110°C
Connectivity	USB 2.0 , LAN
Increase/Decrease in Temperature	0.1 to 10°C
Increase/Decrease in Time	1 to 600 seconds
Power consumption	600 W
Dimension	390×270×255 mm
Weight	9 kg
Electrical Requirements	AC85 to 264 V/47Hz, 63 Hz
Catalogue No.	620250503

MULTI-BLOCK THERMAL CYCLERS

MULTI-BLOCK THERMAL CYCLERS

Multi-Block Thermal Cyclers are used for PCR and other important applications controlled by Marlow Peltier elements to maximize tests, and running multiple reaction conditions for accurate incubations and other useful works. Provide high-throughput, multi-user abilities and interchangeable blocks facilities with an intuitive touch display for easy programming and functioning. Its working technology allows for 2 to 3 independent protocols to be run simultaneously without sacrificing sample throughput.

Duo Touch Thermal Cycler offering different styles of interchangeable blocks, Iris block design provides you with plenty of options. There is the 96-well block with a programmable thermal gradient for optimizing annealing or denaturing temperatures. The most popular block, the dual 48/48, is capable of holding up to 48 0.2 ml tubes on either side along with 30×0.5 ml, 384 well and In-situ plate, with each side acting as its own independent thermal cycler.

1. Dual Block Thermal Cyclers ITCM-4000D Series has been used in PCR applications in research and development, food science, pharmaceuticals, life science, animal diagnostics, and analytical laboratories. Features with customized Marlow Peltier heating units and form 4 circuits to control 4 temperature zones with vibrant touch LCD display and maximum ramping rate 5 °/s.

Trio Block Thermal Cycler offers 3 independent blocks (3× (32×0.2ml) and heated lids within a single housing. As PCR is central for molecular biology research, you need flexible solutions that can help you to reach PCR success for virtually any application. These instruments are renowned for their reliability, accuracy, and user-friendly interfaces. An integral 8-inch touch screen controls the 3 independent thermal cycler blocks and utilizes computers to ensure perfect protocol implementation for every run.

1. Trio Block Thermal Cyclers ITCM-4000T Series equipped with three independent blocks in one instrument. Both multiuser environments, as well as users with lower sample numbers but different samples, will enjoy this model. The three-block design and the specific Temperature Optimisation Step function support the fast optimization of ideal annealing temperatures with Fast Ramping and Best Accuracy, high-performance sample blocks.

DUAL BLOCK THERMAL CYCLERS ITCM-4000D



Dual Block Thermal Cyclers ITCM-4000D series has been used in PCR applications in research and development, food science, pharmaceuticals, life science, animal diagnostics, and analytical laboratories. Features with customized Marlow Peltier heating units and form 4 circuits to control 4 temperature zones with vibrant touch LCD display and maximum ramping rate 5 °/s.

Dual Block Thermal Cyclers ITCM-4000D accommodates 96×0.2 ml, 60×0.5 ml, Double 48×0.2 ml, 48×0.2 ml + 30×0.5 ml along with 384 well and In-situ plate, this block is completely independently of each other and without interference. Fabricated with anodizing technology that has prompt heating conducting and adequate corrosion resistance property.

Features

- Quicker ramp rates allow more work to be done on a workday
- Simple to program unit is compact in design and built to perform
- Programming is in-built with large display and multiple pre-programmed templates supplied with the unit
- Time-saving with great heating and cooling rate along with maximum ramping rate up to 5°C/s
- Peltier heating units with 8 long service life and form 4 circuits to control 4 temperature zones
- Capabilities to run 2 different PCR program in 2 independent blocks controlled simultaneously
- Equipped with Built-in 11 standard program file template for rapidly and accurate necessary files
- Throughout the program, it allows to edit files and showed the remaining time and running program in real-time
- Support USB device with enormous storage capability, 10000 typical PCR files in free configurable folders and LAN for software updating also compatible with devices like mouse and keyboard
- Meet the requirement of denaturation, enzyme cutting/enzyme link, and ELISA
- Operating windows comes with 8" (800×600, 16 colours) TFT vibrant touch graphical display
- Accurate data support and result from analysis record in GLP
- Automatic restart mode and run the unfinished program after power failure
- Meet the need for another testing hot lid temperature and hot lid work mode available
- Assure password and data security along with user login management and three-tier permission
- Connect numerous sets of PCR by single PC controlled
- Email-alert function at the end of the experiment
- To avoid vaporization and melting tubes are fits at different height by a step-less adjustable hot lid with pressure-protection

Technical Specifications

Model	I TCG-1010	I TCG-1110	I TCG-1210	I TCG-1310	I TCG-1410	I TCG-1510	I TCG-1610	I TCG-1710
Capacity	96×0.2 ml		96×0.2 ml + 77×0.5 ml		54×0.5 ml		384 well	
Display	LCD, Graphical, 5.7 inch, 320×240 pixels							
Temperature Range	0 to 99.9°C							
Number of Programs	200							
Uniformity	≤±0.3°C							
Accuracy	≤±0.2°C							
Resolution	0.1°C							
Number of Cycle	99							
Number of Step	9							
Holding Temperature	4°C							
Temperature Control	Block/Tube							
Heating Rate	4.5°C/s							
Cooling Rate	4°C/s							
Ramping Rate Adjustable	0.1 to 4.5°C							
Gradient Temp. Range	-	30 to 99.9°C	-	30 to 99.9°C	-	30 to 99.9°C	-	30 to 99.9°C
Gradient Uniformity	-	≤±0.3°C	-	≤±0.3°C	-	≤±0.3°C	-	≤±0.3°C
Gradient Accuracy	-	≤±0.2°C	-	≤±0.2°C	-	≤±0.2°C	-	≤±0.2°C
Gradient Spread	-	1 to 30°C	-	1 to 30°C	-	1 to 30°C	-	1 to 30°C
Hot Lid Height Adjustable	Step less Adjustable							
Hot Lid Temperature	30 to 110°C							
Increase/Decrease in Time	0.1 to 9.9°C							
Power consumption	600 W							
Overall Dimensions	392×262×252 mm							
Net Weight	10 kg							
Electrical Requirements	264 VAC, 50 to 60 Hz							
Catalogue No.	620150503	620151003	620151503	620152003	620152503	620153003	620153503	620154003

TRIO BLOCK THERMAL CYCLERS ITCM-4000T



Trio Block Thermal Cyclers ITCM-4000T equipped with three independent blocks in one instrument. Both multiuser environments, as well as users with lower sample numbers but different samples, will enjoy this model. The three-block design and the specific Temperature Optimisation Step function support the fast optimization of ideal annealing temperatures with Fast Ramping and Best Accuracy, high-performance sample blocks.

Features

- Capabilities to run 3 different PCR program in 3 independent blocks controlled simultaneously
- Quicker ramp rates allow more work to be done in a workday
- Simple to program unit is compact in design and built to perform
- Programming is in-built with large display and multiple pre-programmed templates supplied with the unit
- Equipped with Built-in 11 standard program file template for rapidly and accurate necessary files
- Throughout the program, it allows to edit files and showed the remaining time and running program in real-time
- Support USB device with enormous storage capability, 10000 typical PCR files in free configurable folders and LAN for software updating also compatible with devices like mouse and keyboard
- Meet the requirement of denaturation, enzyme cutting/enzyme link, and ELISA
- Portable and User-friendly
- Accurate data support and result from analysis record in GLP
- Automatic restart mode and run the unfinished program after power failure
- Meet the need for another testing hot lid temperature and hot lid work mode available
- Bluetooth printer (option)
- Assure password and data security along with user login management and three-tier permission
- Connect numerous sets of PCR by single PC controlled
- Email-alert function at the end of the experiment
- To avoid vaporization and melting tubes are fits at different height by a step-less adjustable hot lid with pressure-protection
- Fully adjustable heated lid

Technical Specifications

Model	ITCM-4005T	ITCM-4010T
Capacity	3×(32×0.2 ml)	
Display	LCD, 8 inch, 800×600 pixels, TFT	
Temperature Range	0 to 100°C	
Number of Program	10000 +(USB FLASH)	
Uniformity	≤± 0.4°C	≤± 0.3°C
Accuracy	≤± 0.3°C	≤± 0.2°C
Resolution	0.1°C	
Number of Cycle	100	
Number of Step	30	
Holding Temperature	4°C	
Temperature Control	Block\Tube	
Heating Rate	4.5°C/s	5°C/s
Cooling Rate	4°C/s	
Ramping Rate Adjustable	0.1 to 4.5°C	0.1 to 5°C
Gradient Temp. Range	30 to 100°C	30 to 100°C
Gradient Uniformity	-	-
Gradient Spread	-	1 to 30°C
Gradient Mode	Independently set 3 gradient temperature	-
Hot Lid Height Adjustable	Step less Adjustable	
Hot Lid Temperature	30 to 110°C	
Connectivity	USB 2.0, LAN	
Temp Increment/Decrement	0.1 to 10.0°C	
Increase/Decrease in Time	1 Sec to 600 Sec	
Power consumption	600 W	
Overall Dimensions	390×270×255 mm	
Net Weight	9 kg	
Electrical Requirements	AC85 to 264 V , 47 63 Hz	
Catalogue No.	620350503	620351003

ADVANCED THERMAL CYCLERS

ADVANCED THERMAL CYCLERS

Advanced Thermal Cyclers are used for nucleic acid amplification and ELISA assay through PCR and controlled by Peltier elements for longer durability, and control temperature zones. Offer temperature uniformity over the entire block and reproducible outcomes regardless of the position of the inserted samples with an intuitive touch display for easy programming and functioning and provide maximum flexibility with an ability to promote gradient system including nonlinear gradient, dynamics gradient, and 2D gradient.

The Iris Advanced Thermal Cyclers ITCP-5000 is designed with 3 different gradient system including nonlinear gradient, dynamics gradient, and 2D gradient. Suitable for the denaturation, enzymes cutting, enzymes link and ELISA assay applications. Offer high heating and cooling rate with the Peltier design unit. Equipped with 11 standard programs for fast editing in particular programs.

The Iris Advanced Thermal Cyclers ITCP-6000 has been used in rapid outdoor detection, all kinds of isothermal amplification of DNA/RNA. Mainly used in Gene amplification with the highest flexibility. Designed with 8×0.2 ml (20 to 100 µl) capacity along with 523 nm (FAM) 584 nm(VIC/HEX) detection wavelength and 470 nm (FAM) 525 nm(VIC/HEX) excitation wavelength. Rapidly set up runs and monitor amplification. Deliver the most sensitive, reliable detection for nucleic acid application.

ADVANCED THERMAL CYCLERS ITCP-5000 SERIES



The Iris Advanced Thermal Cyclers ITCP-5000 is designed with 3 different gradient system including nonlinear gradient, dynamics gradient, and 2D gradient. Suitable for the denaturation, enzymes cutting, enzymes link and ELISA assay applications. Offer high heating and cooling rate with the Peltier design unit. Equipped with 11 standard programs for fast editing in particular programs.

Suitable for the denaturation, enzymes cutting, enzymes link and ELISA assay applications. Offer high heating and cooling rate with a ramping rate up to 7°C/sec. Equipped with 11 standard programs for fast editing in particular programs. Features with Peltier design, large LCD touch display, reaction blocks, air ventilation, hot lid plate, cooling fins and handle. Accommodates 4 different wells including 96×0.2 ml, 6×16×0.2 ml, and 96×0.2 ml well plates with the availability of tubes: 0.2 ml tube, 8 strips, 96 wells plate and this block are completely independently of each other and without interference. Available in 3 different gradient types: Nonlinear Gradient, Dynamics Gradient, and 2D Gradient.

Features

- Peltier heating units with long service life, and control temperature zones
- Suitable for long term use for PCR
- Temperature Range: 4 to 105°C
- Available in 3 different gradient type: Nonlinear Gradient, Dynamics Gradient, and 2D Gradient
- Quicker ramp rates allow more work to be done on a workday
- Simple to program unit is compact in design and built to perform
- Equipped with Built-in 11 standard program file template for rapidly and accurate necessary files
- Throughout the program, it allows to edit files and showed the remaining time and running program in real-time
- Support USB device with enormous storage capability, 20000 typical PCR files in free configurable folders and LAN for software updating also compatible with devices like mouse and keyboard
- Meet the requirement of denaturation, enzyme cutting/enzyme link, and ELISA
- Operating windows comes with 10.1-inch LCD touch display
- Portable and User-friendly
- Automatic restart mode and run the unfinished program after power failure
- Meet the need for another testing hot lid temperature and hot lid work mode available
- Available with 9 shortcut key in main unit
- Support USB2.0 and WIFI
- Assure password and data security along with user login management and three-tier permission
- Connect numerous sets of PCR by single PC controlled

Technical Specifications

Model	ITCP-5100		ITCP-5200		ITCP-5300	
Capacity	96×0.2 ml		6×16×0.2 ml		96×0.2 ml	
Display	10.1-inch LCD					
Temperature Range	4 to 105°C					
Number of Program	20000+ USB FLASH					
Uniformity	±0.2°C					
Accuracy	±0.1°C					
Tube	0.2 ml tube, 8 strips, 96 wells plate					
Display Resolution	0.1°C					
Number of Cycle	100					
Number of Step	30					
Holding Temperature	4°C					
Temperature Control	Block/Tube					
Ramping Rate Adjustable	0.1 to 5°C		0.1 to 6°C		0.1 to 7°C	
Gradient Temperature Range	30 to 105°C					
Gradient Type	Nonlinear Gradient		Dynamics Gradient		2D Gradient	
Gradient Spread	1 to 42°C		0.1 to 5°C		Portrait: 1 to 30°C, Landscape: 1 to 24°C	
Hot Lid Temperature	30 to 115°C					
Connectivity	USB2.0, WIFI					
Increase/Decrease in Temperature	0.1 to 10°C					
Increase/Decrease in Time	1 to 600 seconds					
Power consumption	600 W		600 W		1000 W	
Dimension	385×270×255 mm					
Weight	10 kg		10 kg		11 kg	
Electrical Requirements	100V/50Hz;	240V/60Hz	100V/50Hz;	240V/60Hz	100V/50Hz;	240V/60Hz
Catalogue No.	620400501	620400502	620401001	620401002	620401501	620401502

ADVANCED THERMAL CYCLERS ITCP-6000



Advanced Thermal Cyclers ITCP-6000 has been used in rapid outdoor detection, all kinds of isothermal amplification of DNA/RNA. Mainly used in Gene amplification with the highest flexibility. Designed with 8×0.2 ml (20 to 100 µl) capacity along with 523 nm (FAM) 584 nm(VIC/HEX) detection wavelength and 470 nm (FAM) 525 nm(VIC/HEX) excitation wavelength. Rapidly set up runs and monitor amplification. Deliver the most sensitive, reliable detection for nucleic acid application.

Features

- Achieve accurate results
- On board chargers for rapid outdoor detection
- Small and transportable unit
- 10000 + (USB Flash) program storage memory
- Simple to practice: Sharp, clear 7 inch TFT with resistive touch screen commands
- USB2.0, RS232 cable
- Based on amplification of nucleic acid and fluorescence detection technology

Technical Specifications

Model	ITCP-6000
Capacity	8×0.2 ml (20 to 100 µl)
Display	7 inch TFT with resistive touch screen
Temperature Range	RT +5°C to 100°C
Detection Wavelength	523 nm (FAM) 584 nm(VIC/HEX)
Excitation Wavelength	470 nm (FAM) 525 nm(VIC/HEX)
Temperature Uniformity	≤±0.1°C
Temperature Accuracy	≤±0.5°C
Memory	10000 + (USB Flash)
Detection Speed	≤ 3S
Fluorescent intensity	≤3%
Communication	USB2.0, RS232
Dimension	300×260×170 mm
Weight	Light and Portable
Electrical Requirement	12 V DC
Catalogue No.	6204505-00

REAL-TIME PCR SYSTEM

REAL-TIME PCR SYSTEM

Real-Time PCR System is powerful and flexible instruments use the linearity of DNA amplification to determine relative amounts of a known sequence in a sample. By using fluorescent dye in reaction including FAM, SYBR, GREEN, YELLOW, it is possible to measure DNA generation. Feature with 2 to 5 color multiplexing advanced optical technology, and precise temperature control with thermal gradients.

Real-Time PCR System has been used in immunology, HGP, forensic medicine, oncology, histology, population biology, paleobiologic, zoology, botany and clinical diagnosis of viruses, tumours, and hereditary disorder. Available with 3×48×0.2 ml (5 to 100 µl) and 8×0.2 ml (5 to 100 µ), 8 strip tubes capacity range. Rapidly set up runs and monitor amplification traces in real-time on the integrated TFT display screen.

Real-Time PCR System 1/2 Channel ITR-1000 Series is applicable for real-time detection in farming, breeding, pasteurization, and water sources along with other useful application for detecting and diagnosis epidemic disease, inspection and quarantine in the field of food safety and R & D sectors. ITR-1000 is fluorescence quantitative PCR types with Marlow custom Peltier design.

Real-Time PCR System 2 Channel ITR-2000 Series has been used in immunology, HGP, forensic medicine, oncology, histology, population biology, paleobiologic, zoology, botany and clinical diagnosis of viruses, tumours and hereditary disorder. Designed with 8×0.2 ml (5 to 100 µ), 8 strip tubes capacity and 10 to 10 test dynamic range. Rapidly set up runs and monitor amplification traces in real time on integrated TFT display screen.

Real-Time PCR System 4 Channel ITR-4000 is applicable to molecular biology, microbiology, medicine, molecular cloning in genetics, sequence analysis and various fields. It conducts the whole process of DNA amplification and PCR products analysis in an enclosed tube. Through PC control, it realizes real time as well as auto analysis.

Real-Time PCR System 5 Channel ITR-5000 is based on real-time fluorescence quantitative polymerase chain reaction (PCR) technology, ITR-5000 can be widely used in researches such as immunology, human genome engineering, forensic medicine, oncology, histology, population biology, palaeobiology, zoology and botany, as well as in clinical diagnosis of viruses, tumours and hereditary diseases, etc.

Features

- Rapid detection and high sensitivity
- 6 independent temperature control, simultaneous achievement of different re-naturation temperatures
- Combination of halogen lamp and CCD optical detection system with high accuracy
- Cutting-edge optical fibre and imaging analysis, multi-calibration
- Built-in database, applicable to LIS system

Real-Time PCR System 6 Channel ITR-6000 has been used in immunology, HGP, forensic medicine, oncology, histology, population biology, paleobiologic, zoology, botany and clinical diagnosis of viruses, tumours and hereditary disorder. Designed with 3×48×0.2 ml (5 to 100 µl) capacity and 100 to 1010 test dynamic range. Rapidly set up runs and monitor amplification traces in real time on integrated LCD touch screen. Freshly designed automatic hot-lid without manual operation ensures constant pressure for various tube heights.

REAL-TIME PCR SYSTEM 1/2 CHANNEL ITR-1000



The Iris ITR-1000 real time PCR is applicable for real-time detection in farming, breeding, pasteurization, and water sources along with other useful application for detecting and diagnosis epidemic disease, inspection and quarantine in the field of food safety and R & D sectors. ITR-1000 is fluorescence quantitative PCR types with Marlow custom peltier design.

Features

- Single/Dual channel and dual 8 wells blocks
- Useful function are Absolute/Relative Quantifications/Melting curve/Genotyping
- Side scan technology for short distance and fluorescence acquisition detection process
- Available black reaction block to avoid noise
- Support 20G flash memory to protect 40000 experimental data
- Electromagnetic lock cover technology to avoid accident by hot lid
- Adopt front shut down button for protecting data
- Adopt 10 operating system
- Forward and backward air vent
- Fit for quick and field inception
- Software and printer as an optional accessories
- Provide protection for over current, over temperature, power off data recovery
- Easy to handle, easy to carry

Technical Specifications

Model	ITR-1010	ITR-1020
Capacity	16x0.2 ml(2x8 well, dual block)	
Reaction Volume	10 to 100 μ l	
Temperature Range	0 to 100°C	
Resolution	0.1 °C	
Uniformity	\pm 0.25 °C	
Accuracy	\pm 0.25 °C	
Temperature Control	Block/Tube	
Sensitivity	1 Copy	
Test Dynamic Range	1 to 10 ¹⁰ Copies	
Fluorescent Dye	F1:FAM/SYBR Green I, F2:HEX/VIC/JOE/TET	
Channel	Single Channel	Dual Channel
Ramping Rate	6 °C/s	
Hot Lid Temperature	30 to 115°C (Default 105°C)	
Excitation Wavelength	460 to 550 nm	
Emission Wavelength	F1: 520 to 540 nm	F1: 520 to 540 nm & F2: 540 to 580 nm
Detector	Photoelectric Detector	
Function	Absolute/Relative Quantifications/Melting curve/Genotyping	
Connectivity	Wi-Fi, USB2.0	
Power Consumption	250 W	
Dimensions	300x267x198 mm	
Weight	5.5 kg	
Electrical Requirements	DC15 V	
Catalogue No.	6205005-00	6205010-00

REAL-TIME PCR SYSTEM 2 CHANNEL ITR-2000



Real-Time PCR System 2 Channel ITR-2000 has been used in immunology, HGP, forensic medicine, oncology, histology, population biology, paleobiologic, zoology, botany and clinical diagnosis of viruses, tumours and hereditary disorder. Designed with 8×0.2 ml (5 to 100 μ), 8 strip tubes capacity and 10 to 10 test dynamic range. Rapidly set up runs and monitor amplification traces in real time on integrated TFT display screen.

Features

- The system composed of Real-time sample with 2 independent detection system thermal cyclers
- Achieve accurate results
- On board chargers for rapid outdoor detection
- Small and transportable unit
- Simple to practice: Sharp, clear 7 inch TFT Composed of PCR, LAMP, RPA open system reagent
- USB 2.0 cable
- Highly cost effective 2 channels along with fluorescent dyes
- Fluorescent dyes included F1: FAM, SYBR Green I F2: HEX, VIC, JOE
- Design the system for appropriate requirements
- Outstanding performance of thermal plate

Technical Specifications

Model	ITR-2000
Capacity	8×0.2 ml (5 to 100 µl), 8 strip tubes
Reagent	open system (PCR, LAMP, RPA)
Display	TFT display
Temperature Range	30 to 99.9°C
Uniformity	±0.1°C
Accuracy	±0.1°C
Temperature Control	±0.1°C
Sensitivity	10 copy
Test Dynamic Range	10 to 10
Fluorescent Dye	F1: FAM, SYBR Green I F2: HEX, VIC, JOE
Channel	2
Ramping Rate	≥ 6.5°C/s
Hot Lid Temperature	30 to 110°C
Sample Linearity	r≥0.98
Fluorescent Linearity	r≥0.99
Fluorescent Intensity Detection	CV≤1%
Operating System	LED+PD
Software	Stand alone and PC software
Connectivity	USB 2.0
Overall Dimensions	300×260×170 mm
Weight	Light and Portable
Electrical Requirements	12 V DC
Catalogue No.	6205505-00

REAL-TIME PCR SYSTEM 4 CHANNEL ITR-4000



ITR-4000 real time PCR is applicable to molecular biology, microbiology, medicine, molecular cloning in genetics, sequence analysis and various fields. It conducts the whole process of DNA amplification and PCR products analysis in an enclosed tube. Through PC control, it realizes real time as well as auto analysis.

Features

- Good practicability
- Wide detection scopes
- High sensitivity and accuracy
- Quantitative analysis
- Real-time data monitoring
- Real-time analysis display of the melting curves
- Automatic assessment of negative or positive results

Technical Specifications

Model	ITR-4000
Sample Capacity	48×0.2ml
Test Dynamic Range	10-10 ¹⁰
Full plate fluorescence detection time	< 3s
Applicable fluorophores	F1 : FAM, SYBR Green
	F2 : HEX, VIC, JOE
Temperature Range	30.0-99.9 °C
Temperature Uniformity	±0.3 °C (@55 °C)
Temperature Accuracy	±0.1°C (@55°C)
Heating Rate (MAX)	4°C/s
Cooling Rate (MAX)	4°C/s
Average Heating Rate	≥1.8°C/s
Average Cooling Rate	≥1.8°C/s
Hot-lid Temp. Range	30-105°C
Fluorescence Repeatability	CV≤3%
Sample Detection Repeatability	CV≤3%
Sample Linearity	r ≥0.98
Fluorescence Linearity	r ≥0.99
Communication Interface	USB 2.0/RS-232
Operation System	Windows XP / Vista / 7
Dimension (L×W×H)	457×420×335mm
Electrical Requirement	
Catalogue No.	6206005-00

REAL-TIME PCR SYSTEM 5 CHANNEL ITR-5000

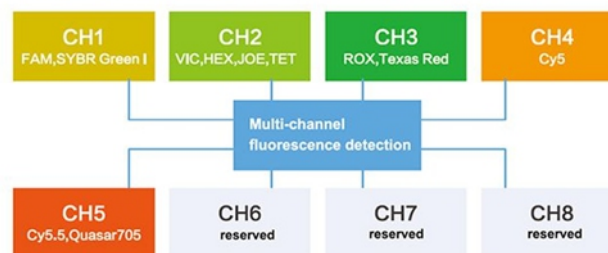


Real-Time PCR System 5 Channel ITR-5000 Based on real-time fluorescence quantitative polymerase chain reaction (PCR) technology, ITR-5000 can be widely used in researches such as immunology, human genome engineering, forensic medicine, oncology, histology, population biology, palaeobiology, zoology and botany, as well as in clinical diagnosis of viruses, tumours and hereditary diseases, etc.

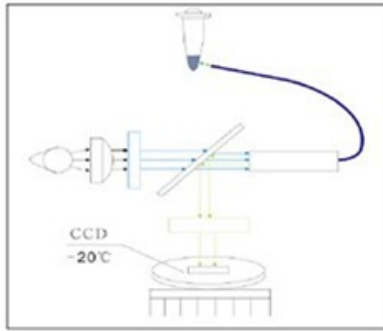
Features

- Rapid detection and high sensitivity
- 6 independent temperature control, simultaneous achievement of different renaturation temperatures
- Combination of halogen lamp and CCD optical detection system with high accuracy
- Cutting-edge optical fibre and imaging analysis, multi-calibration
- Built-in database, applicable to LIS system

Highly Cost-effective Channel Combination, up to 5+3

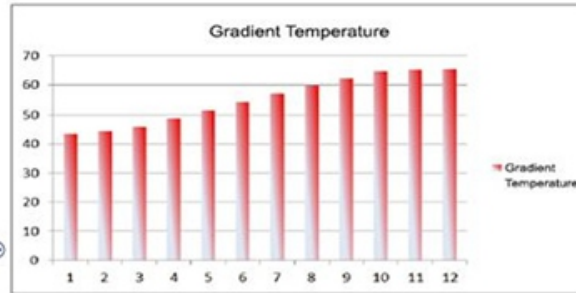


With specially designed optical structure, ITR-5000 can cover a variety of fluorochromes in market and adapt to new ones by replacement of software versions rather than changes of hardware. 5 channels of fluorescence detection for your free choice, such as FAM, SYBR Green I/VIC, HEX, JOE, TET/ROX, Texas Red/Cy5/Cy5.5, Quasar 705. What's more, there are another 3 channels reserved for your special customization.



1. High-performance low temperature CCD
2. Low-background optical fibre system
3. Rapid detection of multicolor fluorescence

6 independent temperature control modules and simultaneous tests under multi renaturation temperatures



Gradient temperature spans more than 20°C.

Technical Specifications

Model	ITR-5000
Sample Capacity	96x0.2ml
Light Source	Halogen lamp
Detection System	CCD
Temperature Range	4-100°C
Sensitivity	up to 1 copy
Test Dynamic Range	100-10 ¹⁰
Reaction Volume	5-100µl
Fluorophores Applicable	F1 : FAM, SYBR F2 : VIC, HEX, JOE, TET. F3 : ROX, Texas Red F4 ; CY5 F5 : CY5.5, Quasar705 F6-F8 : Reserved
Hot Lid	Electronic hot-lid
Temp. Control	Semiconductor TE
Uniformity	±0.2°C
Accuracy	±0.1°C
Heating Rate	≥4.5°C*
Cooling Rate	≥4.5°C*
Hot-lid Temp. Range	30-105°C
Fluorescence Repeatability	CV ≤ 1%
Fluorescence Extraction Location	Tube Bottom
Communication Interface	USB 2.0
Operation System	Windows Vista/7/8/10
Input Power	100-240V, 50/60Hz, 1000VA
Dimension (L*W*H)	500x350x300mm
Electrical Requirement	
Catalogue No.	6206505-00

REAL-TIME PCR SYSTEM 6 CHANNEL ITR-6000



Real-Time PCR System 6 Channel ITR-6000 has been used in immunology, HGP, forensic medicine, oncology, histology, population biology, paleobiologic, zoology, botany and clinical diagnosis of viruses, tumours and hereditary disorder. Designed with 3×48×0.2 ml (5 to 100 µl) capacity and 100 to 1010 test dynamic range. Rapidly set up runs and monitor amplification traces in real time on integrated LCD touch screen. Freshly designed automatic hot-lid without manual operation ensures constant pressure for various tube heights.

Features

- The system composed of Real-time sample with 3 independent detection system thermal cyclers
- Achieve accurate results with volumes of up to 5 to 100 µl
- Highly cost effective 8 channels along with fluorescent dyes
- Buildings with photoelectric sensor detector and LED display
- Real time remote control come with wireless facilities
- Real time fluorescence quantitative PCR technology
- Productions with quick laboratory pollution detection and positive detection rate
- Programming interface including quantitative analysis, sample parameter setting, melting curve, gradient amplification curve, sensitivity experiment
- Outstanding performance of thermal plate
- Design the system for appropriate requirements

Working based on to achieve reagent sample amplification, denaturation of sample under high temperature, annealing and extension under low or optimum temperature

- With up to 144 samples detection , supreme thermal cyclers performance, incomparable stand-alone functionality and dominant however software are easy to use

USB 2.0 cable and Windows vista/7/8/10 operating system

Technical Specifications

Model	ITR-6000
Capacity	3×48×0.2 ml(5 to 100 µl):48, 96 and 144(optional)
Reaction Volume	5 to 100 µl
Display	LED
Temperature Range	4 to 100°C
Uniformity	±0.1°C
Temperature Control	±0.1°C
Detector	Photoelectric sensor
Sensitivity	1 copy
Test Dynamic Range	100 to 1010
Fluorescent Dye	F1: FAM, SYBR, GREEN, F2: VIC, HEX, JOE, TET, YELLOW, F3: CY3, F4: ROX, F5: CY5, F6:, CY5.5, F7: Reserved , F8: Reserved
Channel	8
Ramp up Rate	≥ 6.5°C/s
Ramp down Rate	≥ 6.5°C/s
Hot Lid	Automatic
Hot Lid Temperature	30 to 110°C
Sample Linearity	Linear regression coefficient r≥0.999
Fluorescent Intensity Detection	CV≤0.5%
Temperature Control Pattern	Semi-conductor TE module
Operating System	Windows vista/7/8/10
Connectivity	USB 2.0
Overall Dimensions	586×525×780 mm
Weight	
Electrical Requirements	100 to 240V, 50/60Hz, 500 to 1500 VA