

Thermal Cyclers



About PCR

Polymerase Chain Reaction (PCR) is an in vitro method of nucleic acid synthesis useful in the detection and analysis of DNA and RNA in cell and molecular biology investigations. Through PCR, a small, unique segment of DNA can be specifically replicated, exponentially amplified and easily analyzed. Because PCR depends on repeated cycles of heating and cooling within a sample block, rapid temperature ramping, precise temperature control, block uniformity and flexible segment programming are essential performance attributes of a Thermal Cycler.



Swift MaxPro Thermal Cycler

Esco Swift MaxPro thermal cycler offers 5 interchangeable blocks designed to meet critical requirements for Gradient PCR, Touch Down PCR, High Throughput PCR and In Situ PCR; using a variety of PCR tubes, strips, plates and slides. The Swift MaxPro thermal cycler uses state of the art peltier temperature control technology to achieve and maintain precise control and fast ramp rates with minimal over- or under-shoot for process speed and accuracy.

General Features

- The peltier module, electronics and sensors are precision tuned and tested to ensure the longest operating lifespan possible.
- Multi-block capability with automatic block recognition software minimizes the need for manual settings.
- PC management software allows you to control up to 30 MaxPro thermal cyclers via one PC.
- Large-screen interface for all functions.

- Password protection guarantees secure system access.
- Pre-programmed methods provide easy choice.
- Easy, graphical programming for temperature, holding time, ramp rate, pause and other functions.
- Powerful software meets a variety of experimental requirements, such as gradient PCR, Touch down PCR, time release PCR, In Situ PCR and others.
- Large memory stores up to 100 individual methods in equipment; unlimited methods on USB memory stick or PC.
- Automatic restart saves setpoints and resume process in the event of power interruption.
- Adjustable hot lid temperature and ramp rate.
- Software updates can be downloaded via Internet.
- Industry leading warranty for Peace of Mind.

Reliable - Swift $MaxPro_{\mbox{\tiny B}}$ builds on the proven reliability of Swift $Maxi_{\mbox{\tiny B}}$



Normal Block



MaxPro Block

Superior Performance

- Excellent temperature uniformity
 Unique temperature control technology guarantees extremely uniform temperature between central and edge wells.
- Highest temperature precision
 The best peltier components with precision control technology provides highest temperature accuracy.





Robust Security

- Password protection features on both the MaxPro thermal cycler and PC software protects your confidential methods and techniques.
- Save important methods on USB memory stick or PC as backup.
- Automatic restart saves setpoints and guarantees successful PCR cycling in the event of power interruption.

Long Warranty Period, Peace of Mind

- The peltier module, electronics and sensors are precision tuned and tested to ensure the longest operating lifespan possible.
- Backed by an industry leading 3 year warranty for main body, 2 year warranty for block.

Certified Quality ISO 9001:2000 Certificate	ISO 13485:2003	ISO 14001:2004 Certificate	CE & EMC Certificate	W	Œ	Ling Robert	PT Eco Retat Indonesia Cert. No: 6512221	
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Flexible - Your Application, Your Cycler

Five Interchangeable Blocks



MaxPro Block 1, Gradient 96 x 0.2ml

For applications in which the annealing temperature must be determined empirically, gradient blocks save time and increase productivity. The temperature gradient is programmable over 12 rows.

- Gradient range of up to 30°C
- Adjustable ramping rate of up to 4.0°C/ sec.
- 0.2mL tubes, 96-well microplates, 12 x 8 strips, 8 x 12 strips.



MaxPro Block 2, 30 × 0.5mL + 48 × 0.2mL

Both 0.5mL and 0.2 mL tubes can be used in a single block.

• 0.2 mL tubes, 0.5 mL tubes, 4 x 12 strips.



MaxPro Block 3, Gradient 384

High throughput block with programmable temperature gradient over 24 rows.

- Gradient range of up to 30°C.
- 384-well microplates.



MaxPro Block 4, Dual 48 × 0.2mL + 48 × 0.2mL

Two thermal cyclers in one! Two independent experiments may be carried out at the same time.

- Adjustable ramping rate of up to 4.0°C/ sec.
- 0.2mL tubes, 6 x 8 strips.



MaxPro Block 5, 4 Slides In Situ

- For In Situ PCR
- 4 in situ slides.

Three Modes of Operation



Adjustable Hot Lid



Prevents reagents from evaporating. Hot lid height is adjustable to suit all kinds of tubes.

Adjustable Ramp Rate



High ramp rate of up to 4.0°C/ sec. Suits all reagents. Allows protocols to be transferred from other cyclers.

Open Platform

Open platform chemistry and consumables assure compatibility with commonly used protocols. Most common tubes, strips and microplates can be used with the MaxPro cycler.



User - Friendly – Simple To Operate



Software Upgrades - Update software via RJ45 port when enhancements are available



Thermal Cyclers • Swift MaxPro Thermal Cyclers

General Specifications, Swift MaxPro Thermal Cycler (SWT-MXP)					
Block Code	SWT-MXP-BLC1	SWT-MXP-BLC2	SWT-MXP-BLC3	SWT-MXP-BLC4	SWT-MXP-BLC5
Sample Capacity	96 × 0.2mL	48 × 0.2mL + 30 × 0.5mL	384 wells	48 × 0.2mL + 48 × 0.2mL	4 Slides
Applicable Consumables	0.2mL tubes 96-Well Microplate 12 x 8 strips 8 x 12 strips	0.2 mL tubes 0.5 mL tubes 4 x 12 strips	384-well microplates	0.2mL tubes 6 x 8 strips	4 In Situ Slides
Temperature Range	4°C ~ 99°C				
Max. Heating Rate	4.0°C / sec	2.8°C / sec	2.8°C / sec	4.0°C / sec	1.8°C / sec
Max. Cooling Rate	4.0°C / sec	2.8°C / sec	2.8°C / sec	4.0°C / sec	1.8°C / sec
Temperature Uniformity	±0.2°C				
Temperature Accuracy	±0.2°C				
Max. Gradient	30°C	-	30°C	-	-
Min. Gradient	1°C	-	1°C	-	-
Hot Lid Temp. range	30°C ~ 110°C				
Temp. Control Mode	Block mode or tube mode				
Display	5.7" graphical LCD				
Protocol Capacity	100 protocols in internal memory; unlimited with use of USB memory stick and/or PC (optionally password protected)				
PC Interface	RJ45				
Dimensions (W x D x H)	306 × 386 × 295 mm (12" × 15" × 11.6")				
Weight	10 kg / 22 lbs				
Electrical	100-240 VAC 50 / 60 Hz 600W				
Fuse	250V 8A ø5 × 20				
Warranty	3 years for main body, 2 years for blocks				

Model	Description			
SWT-MXP	Swift MaxPro Cycler Main Body 100-240VAC			
SWT-MXP-BLC-1	Swift MaxPro Block 1 (96x0.2mL) Gradient			
SWT-MXP-BLC-2	Swift MaxPro Block 2 (30×0.5mL+48×0.2mL)			
SWT-MXP-BLC-3	Swift MaxPro Block 3 (384-well microplates) Gradient			
SWT-MXP-BLC-4	Swift MaxPro Block 4 (48 x 0.2mL) x2			
SWT-MXP-BLC-5	Swift MaxPro Block 5 (4 In Situ Slides)			

Order Information

Since 1978, Esco has emerged as a leader in the development of controlled environment, laboratory and cleanroom equipment solutions. Products sold in more than 100 countries include biological safety cabinets, fume hoods, ductless fume hoods, laminar flow clean benches, animal containment workstations, cytotoxic cabinets, hospital pharmacy isolators, and PCR cabinets and instrumentation. With the most extensive product line in the industry, Esco has passed more tests, in more languages, for more certifications, throughout more countries than any biosafety cabinet manufacturer in the world. Esco remains dedicated to delivering innovative solutions for the clinical, life science, research and industrial laboratory community. www.escoglobal.com.



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