All-in-One Liquid CPU Cooler

ELC120 Series

ENERMAX
POWER. INNOVATION. DESIGN.

Features

Maintenance-free Cooling System
All-in-One liquid CPU cooler with pre-filled coolant offers best usability and maximum cooling performance for powerful PC systems.

Quad-Shunt Channel
Patented cold plate design for maximum cooling performance. Four shunts minimize the "Boundary Layer" effect, eliminate heat spots and ensure a perfect heat dissipation.

Twister Bearing
Two smooth-running and persistent silent fans thanks to patented Twister Bearing Technology (min. 100,000 hours MTBF).

Effective Fan Decoupling
Delivered with rubber pads to reduce the fan vibrations and noise generation.

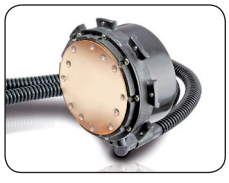
Eye Catcher
ELC120-TA with blue T.B.Apollish LED fans. Patented circular LED light with 12 diodes.

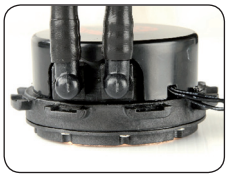
Tri-Cooling Mode
High-performance PWM fans with innovative speed range switch for an individual RPM setting according to the system requirements: Silent Mode (800-1,500 RPM), Performance Mode (800-1,800 RPM) & Overclock Mode (800-2,200 RPM).

Long-Life Pump
Pump with durable ceramic bearing for reliable and noise-less performance.

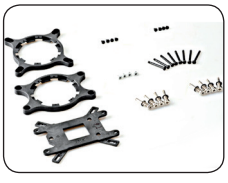
Flexible & Robust Tubes
High-quality tubes made of FEP (Fluorinated Ethylene Propylene) guarantee non-permeable and long-lasting operation.

Easy & Universal Mounting System
User-friendly and quick mounting system giving perfect contact force with the CPU. Full support of all latest AMD® and Intel® sockets.


Powerful and silent pump

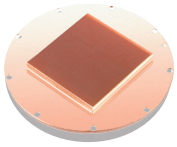

Ceramic Bearing for durable operation


Non-permeable FEP tubes


User-friendly brackets for AMD® & Intel® sockets


Perfect contact force

Quad-Shunt Channels

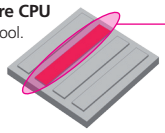


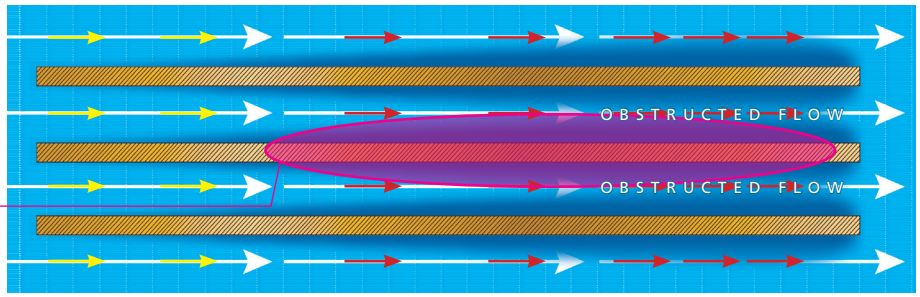
MICRO-FIN STRUCTURE

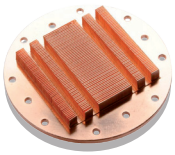
When the coolant enters the micro-fin channels, a part of the liquid will form a conti-nuously growing laminar flow layer on the metal fins. It will obstruct the passage through the fins and alloy the heat dissipation.

Quad Core CPU

Core 1/3/4 in idle mode remain cool.
Core 2 in turbo mode generates hot spot.





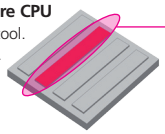


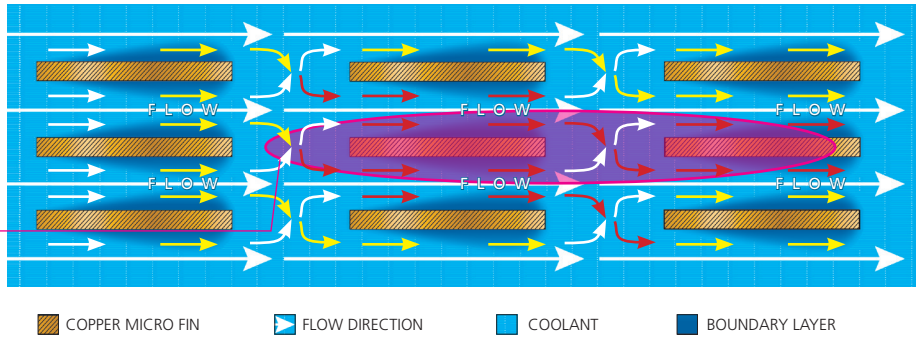
MICRO-FIN STRUCTURE WITH SHUNT CHANNELS

The clue: The cold plate design has been improved by adding four shunt channels. At the right position, these shunts minimize the boundary layer effect. The coolant can absorb more heat and the cooler achieves a much better cooling performance.

Quad Core CPU

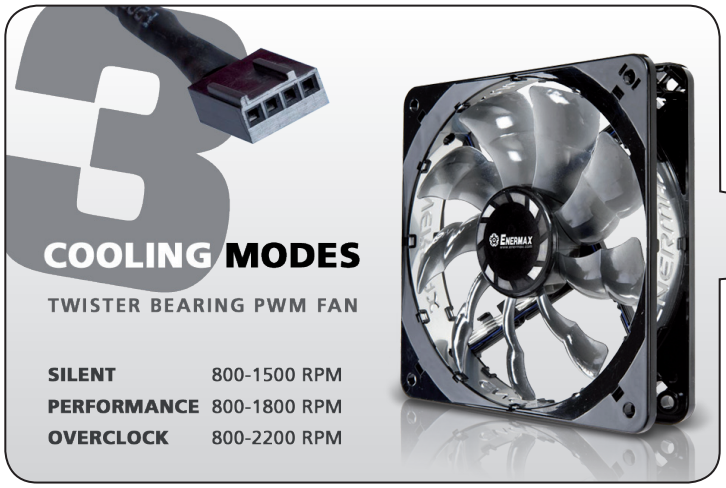
Core 1/3/4 in idle mode remain cool.
Core 2 in turbo mode generates hot spot.

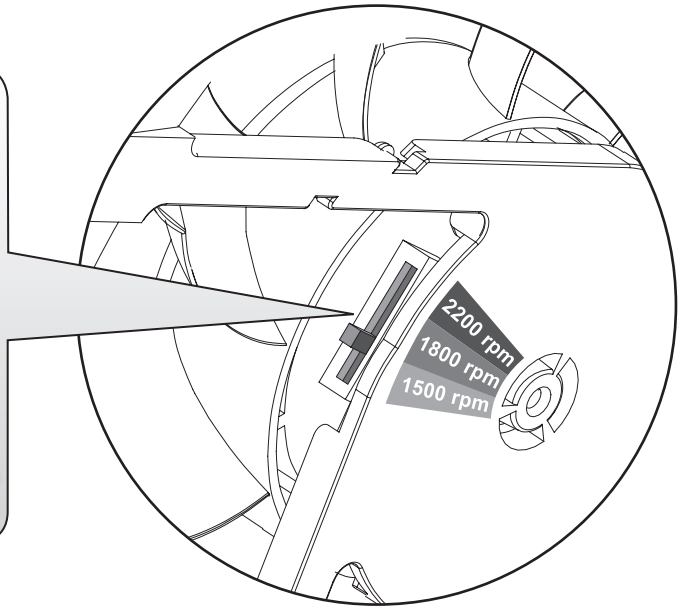




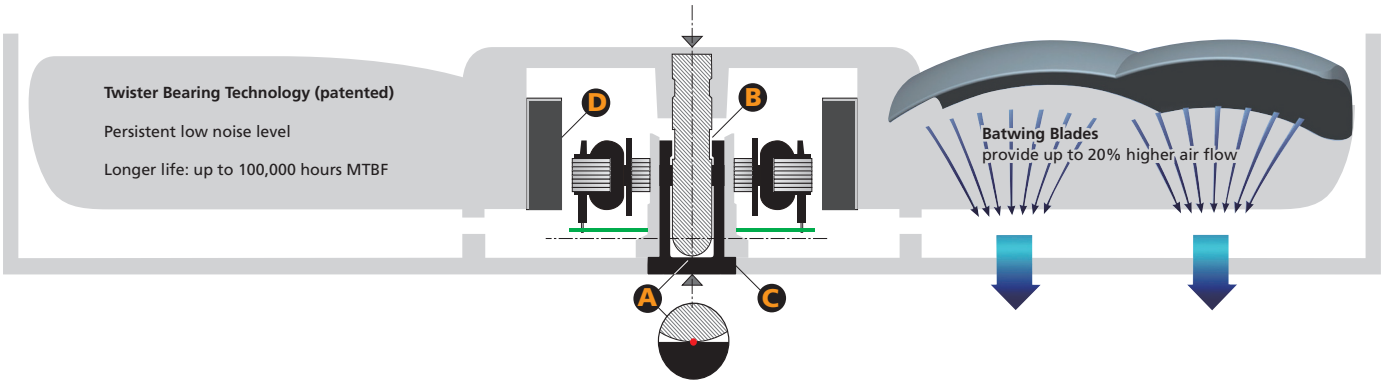
COPPER MICRO FIN FLOW DIRECTION COOLANT BOUNDARY LAYER

Tri-Cooling Mode





Twister Bearing Technology



A **Minimal contact area**
For an effective noise reduction

B **Click Mechanism**
Detachable blades for easy cleaning

C **Life-lubricated bearing sleeve**
Abrasion protection for a longer lifetime

D **Magnet ring**
Smooth and frictionless operation.

Specifications

		ELC120		
Cold Plate	Material	Copper		
Pump	Bearing	Ceramic Bearing		
	MTBF	50,000 hours		
	Motor Speed	2200 rpm		
	Rated Voltage	12 V		
	Rated Current	0.45 A (Average 0.34 A)		
Radiator	Dimension	151 x 120 x 32 mm		
	Material	Aluminium		
Tube	Material	FEP		
	Length	315 mm		
Weight (w/o fan)		495 g		
Bracket	Compatibility	Intel® LGA 775/1155/1156/1366/2011, AMD® AM2/AM2+/AM3/AM3+/FM1/FM2		
Fan	Dimension	120 x 120 x 25 mm		
	Bearing	Twister Bearing		
	MTBF	100,000 hours		
	Rated Voltage	12 V		
	Rated Current	0.45 A (Average 0.25 A)		
	Connector	4 pin PWM		
	ELC120-TA			
		Silent Mode	Performance Mode	Overclock Mode
	Speed (RPM)	800 ~ 1500	800 ~ 1800	800 ~ 2200
	Air Flow (CFM)	33.3 ~ 63.3	33.3 ~ 76.0	33.3 ~ 92.9
	Air Flow (m^3/h)	56.5 ~ 107.5	56.5 ~ 129.1	56.5 ~ 157.8
	Static Pressure (mm-H2O)	1.0 ~ 1.7	1.0 ~ 2.3	1.0 ~ 3.4
	Noise Level (dBA)	18.5 ~ 25.5	18.5 ~ 29.4	18.5 ~ 32.8
	LED	Patented circular LED light with 12 blue diodes		

	ELC120-TB			
		Silent Mode	Performance Mode	Overclock Mode
Fan	Speed (RPM)	800 ~ 1500	800 ~ 1800	800 ~ 2200
	Air Flow (CFM)	37.6 ~ 71.3	37.6 ~ 86.7	37.6 ~ 105.9
	Air Flow (m³/h)	63.9 ~ 121.1	63.9 ~ 147.3	63.9 ~ 180.0
	Static Pressure (mm-H2O)	0.7 ~ 1.7	0.7 ~ 2.4	0.7 ~ 3.6
	Noise Level (dBA)	17.3 ~ 24.3	17.3 ~ 28.3	17.3 ~ 31.2
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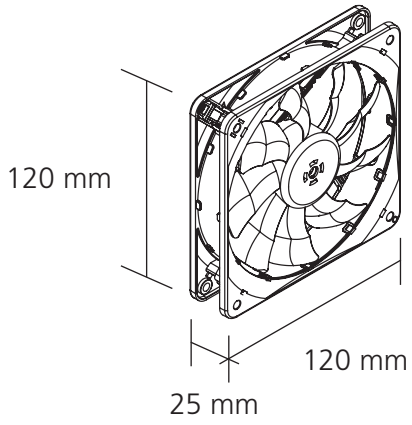
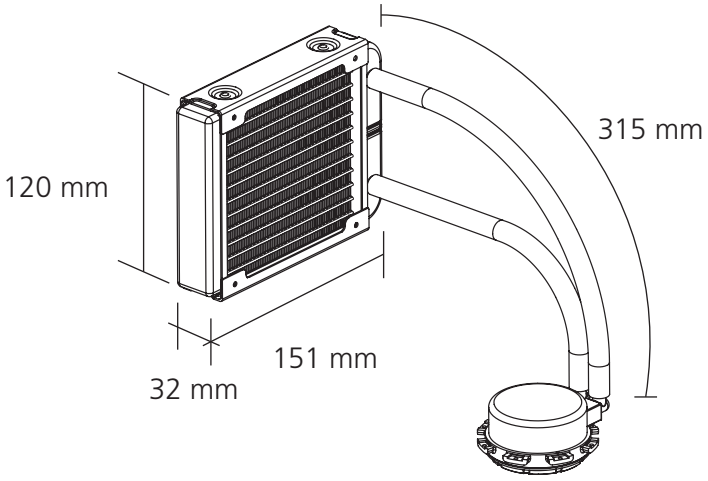
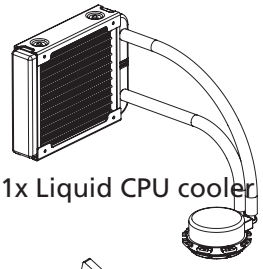
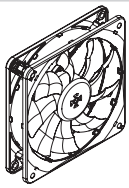
Dimensions (in mm)

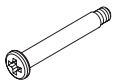




Package Content

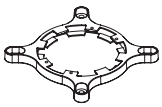

1x Liquid CPU cooler

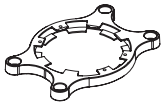

2x 12cm PWM fans

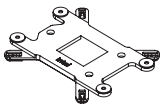

8x Fan screws

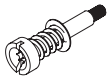

4x Case screws

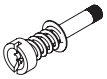

4x Back plate nuts


1x Intel® bracke


1x AMD® bracket


1x Back plate


4x Bracket screws


4x Bracket screws for Intel® LGA 2011


8x rubber pads

Certifications & Standards

Z385 N4251