

DeltaMate

CPU Block - MPII 1851



High Performance Cooling Solutions

The Thermal Grizzly DeltaMate CPU Block - MPII Intel 1851 Black is a premium CPU water block optimized for Intel's LGA1851 socket. The cooler is also backward compatible with socket LGA1700. As part of the DeltaMate series, the cooler is designed to the highest standards and is manufactured and assembled under strict quality controls. Only the highest-quality materials are used in production to meet the demands of hardware enthusiasts and set new industry standards.

It consists of four primary components: a nickel-plated Ultra-High-Performance cold plate, a solid nickel-plated brass housing, a viewing window made of borosilicate glass, and an anodized aluminum cover. A black anodized backplate made of milled aluminum is also included. Stylish RGB LED lighting highlights the elegant design of the water block when illumination is desired. The RGB LEDs can be controlled via a 3-pin ARGB header (+5 V/DATA/GND) on the motherboard.

Thermal Grizzly's Ultra-High-Performance cold plates for CPU and GPU coolers are milled with minimal and highly optimized slot and fin widths. In the case of the DeltaMate CPU Block - MPII Intel 1851 Black, the cold plate features a hybrid structure on the nickel-plated copper cooling plate. Above the CPU tile, the 40 fins each feature a channel width and fin width of 0.2 mm. The high number of thin fins provides a large surface area through which heat can be transferred to the coolant quickly and efficiently. Above and below the CPU tile area, a total of 30 fins with a width of 0.3 mm are used for optimized flow distribution.

The G1/4-inch ports are offset toward the upper right in the solid brass housing and are designed to be especially robust. This offset arrangement also provides a clear view of the cooler structure through the borosilicate glass window. The sealing O-rings are made from high-quality EPDM rubber, providing excellent durability, elasticity, and resistance to coolants, heat, and aging for reliable performance. The included cover can be attached to the water cooler using magnets. This allows the cooler to be used in the system in two different visual configurations, depending on personal preference.

Scope of Delivery

- 1x DeltaMate CPU Block - MPII Intel 1851 Black
- 1x Pressure Test Certificate for 1 bar
- 1x LGA1851 Backplate
- 1x 2 mm Hex Key
- 1x 2.5 mm Hex Key
- Mounting Kit

Key Information

- Ultra-High-Performance premium CPU water block for Intel socket LGA1851
- Nickel-plated copper cooling plate with Ultra-High-Performance microfins (0.2 mm)
- Optimized flow distribution through CPU tile microfins (0.3 mm)
- Full-metal housing with RGB-illuminated viewing window made of borosilicate glass
- Particularly durable brass threaded inserts, including standard G1/4" ports
- Included cover for optionally concealing all screws and the mounting system
- Compatibility list available online

Technical Data

Unit:	Value/description:
Size	94.5 x 94.5 x 26 mm
Installed height	33 mm
Port spacing	28 mm
Coolant Capacity	28.4 ml
Materials	
Coldplate	Nickel-plated copper
Body	Nickel-plated brass
Window	SCHOTT BOROFLOAT® borosilicate glass
Exterior	Anodized aluminum 6082
Gasket	EPDM

Name:	Item number:	EAN code:	Packaging size:	*Net weight:	*Gross weight:
DeltaMate CPU Block - MPII 1851	TG-DM-CPU-002	4260711992759	5,4 x 16,7 x 23cm	901 g	1157 g

*Net weight is the total weight of an article excluding the weight of packaging and accessories. The gross weight refers to the total weight of the product including accessories and packaging. Slight weight deviations are possible due to production factors.

In addition to its visual effects in combination with the RGB LED lighting, the high-quality SCHOTT BOROFLOAT® glass offers excellent UV resistance. Borosilicate glass is significantly harder and more scratch-resistant than comparatively soft acrylic glass, which can be scratched more easily during cleaning or through contact. Another advantage is its high chemical resistance. Unlike acrylic glass, the borosilicate glass used is less susceptible to alcohol-based cleaning agents.

The Thermal Grizzly DeltaMate CPU Block - MPII Intel 1851 Black in Testing

In Thermal Grizzly's in-house test system for CPU water blocks, the DeltaMate CPU Block - MPII Intel 1851 Black was able to cool the Intel Core Ultra 9 285K, configured with fixed power settings, to an average of 63.8 °C under full load and effectively dissipate the resulting thermal design power (TDP) of approximately 260 watts. The flow rate was 2.57 l/min. These results demonstrate the strong cooling performance of the DeltaMate CPU Block - MPII Intel 1851 Black, including in comparison with other high-end CPU water blocks.

Due to the fixed power settings, the tested Intel Core Ultra 9 285K produces almost twice the thermal design power of an unmodified 285K, which according to Intel has a base power of 125 watts and, depending on the motherboard, can reach a short-term maximum boost of up to 250 watts.

Overview of the test system for CPU water blocks:

- Intel Core Ultra 9 285K (5.4 GHz, 1.4 Vcore, LLC Low, XMP7600, approx. 260 watts)
- Watercool MO-RA3, including four 200 mm fans from Noctua
- Keyence FD-X non-restrictive flow sensor
- Xylem Lowara D5 pump with a pump speed of approx. 3,400 rpm
- Thermal Grizzly Kryonaut

Product-Specific Notes

- The DeltaMate CPU Block - MPII Intel 1851 Black is compatible with the Intel High Performance Heatspreader V1 (LGA1700 socket).
- The G1/4-inch threads of the inlet and outlet ports are each 6 mm deep.

General Notes on Water-Cooling Products

- Do NOT use in combination with aluminum-based water-cooling components in which the coolant comes into contact with aluminum, such as radiators with aluminum tubes.
- We recommend suitable coolants that contain biocides and corrosion inhibitors and are free of particles that could restrict water flow or clog the loop.
- The custom water-cooling system should be leak-tested with an air pressure tester for at least 1 hour before filling.
- After filling, the system should be checked regularly during the first 24 hours for possible coolant leaks.

Quality Without Compromise: Made in Germany

The DeltaMate CPU Block - MPII Intel 1851 Black is manufactured at our production site in Germany in compliance with the highest quality standards. Our professionally trained staff continuously monitor the entire production chain. Particular attention is paid to the microfins, which are specially protected against contamination throughout the production process.

In addition, all DeltaMate CPU Block - MPII Intel 1851 Black units undergo a compressed-air test at 1 bar after assembly as part of quality control. A corresponding pressure test certificate is included.

Trademark Information

DeltaMate is a registered trademark.
Thermal Grizzly is a registered trademark.

Please Note

The information provided in this technical data sheet is based on our current knowledge and experience. Due to the multitude of possible factors that may influence its use, this information does not release installers and users from the obligation to carry out their own tests and trials. No legally binding guarantee of specific properties or suitability for a particular application can be derived from the information provided.

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