



Thermalright

Macho 90



Technical Data

Length	102 mm (incl. fan)
Width	127 mm (incl. fan)
Height	135 mm (incl. fan)
Weight	552 g (incl. fan)
Fan dimensions	92 x 92 x 25 mm
Fan speed	800 - 2,000 rpm
Airflow	26.8 - 66.9 m³/h
Noise	21 - 27 dB(A)
Bearing	Sleeve Bearing
Fan connector	4-Pin PWM
Heatpipe	4 x 6 mm
Max. TDP	160 W
Manufacturer Number	Macho 90
EAN Code	814256001076
Order Number	100700725

Logistical Data

Height (packaging unit)	155 mm
Width (packaging unit)	130 mm
Depth (packaging unit)	100 mm
Gross weight (packaging unit)	0,62 kg
Height (shipping box)	200 mm
Width (shipping box)	310 mm
Depth (shipping box)	570 mm
Gross weight (shipping box)	7,61 kg
pcs / (shipping box)	10
Code	814256001076
Harmonized Code	84733080000
Country of Origin	China



Thermalright Macho 90 Multiple Heatpipe Kühler für Intel LGA 1366/1156/1155/2011*/1150/2011-3* und AMD AM2/AM2+/AM3/AM3+/FM1/FM2/FM2+ CPUs, 92 mm PWM Lüfter (600 - 2.000 U/min, 21 - 27 dB(A), max. 74,8 m³/h)

With the Macho 90 we offer you a specially designed CPU-cooler for high-performance Mini-ITX and Micro-ATX systems. This most compact model of our award-winning Macho family allows an efficient and very silent cooling, even when space is limited.

In order to meet the space requirements of compact Mini-ITX boards, while at the same time offer a large-surface heatsink with all the positive side effects that stem from it, the cooler has been placed directly above the CPU-socket. Incompatibilities to memory banks or other motherboard components can be almost excluded by this. We cannot guarantee that RAM modules with very high heat spreaders will fit.

The almost quadratic heat sink is equipped with four high-quality heatpipes, which are positioned in a way that guarantees the optimal transfer of the waste heat from the processor to the 27 aluminum fins. The spacing of the aluminum fins and the larger surface area of the heat sink guarantees a far above average performance even at minimum fan speed and noise. The special design of the heatsink's aluminum fins allows for a particularly low air resistance and contributes measurably to the efficient heat dissipation.

The workmanship of the Macho 90 is of the highest quality: the four copper heatpipes are nickel-plated and offer in combination with the black anodized top fin a very elegant appearance, probably unique in a cooler in this price range. In this way, we combine the high-quality optics of the high-priced high-end coolers with the award-winning, outstanding price-performance ratio of the Macho family.

Due to the installation height of just 135 mm, the cooler can be installed in a variety of compact PC-cases. Nevertheless, we would like to ask you to check the space your system offers. When taking into account the compact dimensions of the Macho 90, the cooler offers an outstanding cooling capacity. Still, we did not intend this cooler to be used on socket 2011/2011-3. If you plan to use this cooler on such a socket, there is an appropriate mounting kit separately available. A specially designed screwdriver for the installation of the cooler on the motherboard is included.

In addition to the attractive price the compact dimensions, the low weight of just 450 grams including the fan and the excellent compatibility are key features of the smallest member of the our Macho family.

A high-quality 92 mm fan is included, which uses the PWM signal of the motherboard (if supported) to automatically and continuously adjust the fan speed between 800 – 2,000 rpm (+/- 15%). Thus the optimal ratio between sound volume and cooling capacity is guaranteed at all times, without the need to manually engage. The fan covers the heat sink almost completely, thereby providing an efficient airflow through the heat sink as well as optimum heat dissipation.

The Macho 90 is multiplatform-compatible and includes mounting material for all common CPU-sockets:

The cooler can be used on Intel LGA 775/1156/1366/2011*/1155/2011/1150/2011-3/1151* as well as on AMD AM2/AM2+/AM3/AM3+/FM1/FM2/FM2+ boards.

Please note: If you want to install the True Spirit 90 M Rev. A on a socket 2011 or 2011-3 motherboard, you will need the 2011 mounting frame, that can be purchased separately in stores. We would like to inform you that this model has not been designed to adequately cool a 2011 system.

*If you want to use our cooler on LGA1151 processors, we recommend using our special washers. Please contact us by email and we will send it to you for free.

