# NOCTUA NM-AMB13 MOUNTING KIT



LOGISTIC DATA

Product name
Noctua NM-AMB13

EAN

9010018201574

841501121579

Packaging dimensions (HxWxD)

117x29x17 mm

Weight incl. packaging

36 g

Warranty **6 years** 

Packaging unit

200 pcs

Packaging dimensions / unit (HxWxD)

312x231x201 mm

Weight incl. packaging / unit

7.80 kg

The NM-AMB13 are offset AM5 mounting bars for Noctua CPU coolers with 83mm mounting pitch that require their mounting points at the east and west side of the socket for optimal orientation, such as the popular NH-U12P (SE2), NH-U12(F), NH-U9B (SE2) or NH-U9(F) (see detailed compatibility list). By offsetting the heatsink 7mm towards the south side of the socket, more pressure is applied right above the CPU's CCD(s). This improved contact exactly at the processor's hotspot can significantly reduce CPU temperatures with typical improvements in the range of 1-3°C. Replacing the standard mounting bars and re-using the original spacers and screws, the NM-AMB13 are a simple yet highly efficient measure for optimising thermal performance on AM5-based AMD Ryzen CPUs.

### Offsetting for the hotspot

AMD's latest Ryzen processors have their Core Complex Die(s) not at the centre, but slightly towards the south side of the CPU. By shifting the heatsink right above the hotspot created by the CCD(s) and applying optimal contact pressure where it matters the most, thermal performance can often be improved significantly.

## Cooler, faster, quieter

While the results can vary due to different heat flux densities, tolerances of both the CPU and heatsink as well as other factors such as thermal paste application, the offset mounting can yield significant improvements with typical reductions in core temperatures ranging between 1 and 3°C on high-end AM5 processors. These gains can be used to let the CPU run cooler, to achieve higher boost clock frequencies or to reduce fan speeds and noise levels.

## One bar, two positions

The offset mounting bars feature two hole sets, one for offsetting the cooler 7mm towards the south side of the socket and one for the standard, non-offset position. The latter can be used in the unlikely case that the offset position causes compatibility issues, such as clearance problems with motherboard heatsinks or PCIe cards.

## Compatible with AM5 and AM4

While primarily designed for AM5, the offset mounting bars can also be used on AM4, where they may yield slight improvements on Ryzen 5000 and 3000 series processors. However, the improvements when using the offset mounting position on these CPUs tend to be much smaller, typically  $<1^{\circ}\text{C}$  instead of the 1-3°C gains that can be achieved on AM5.

## SCOPE OF DELIVERY

NM-AMB13 mounting kit

## NM-AMB13 MOUNTING KIT SPECIFICATIONS

Socket compatibilty	AMD AM4 AM5
Cooler compatibility	NH-U12, NH-U12F, NH-U12P, NH-U12P
	SE2, NH-U12P SE1366, NH-U9, NH-U9F,
	NH-II9R NH-II9R SF2

Please double check heatsink compatibility before purchasing! NM-AMB13 can only be used for the models mentioned above, please choose NM-AMB12, NM-AMB14 or NM-AMB15 for other models



