NH-D12L

The NH-D12L is a low-height 120mm class CPU cooler that has been conceived to combine outstanding quiet cooling performance with superior case compatibility. At a height of only 145mm (13mm lower than Noctua's regular 120mm models), it fits many 4U enclosures as well as narrower tower cases that have been previously limited to solutions with 92mm fans. At the same time, its five heatpipe dual-tower design and state-of-the-art NF-A12x25r 120mm fan allow it to achieve a level of efficiency that surpasses many full-height 120mm models. Thanks to its single fan configuration and asymmetrical fin stacks, the NH-D12L provides 100% RAM compatibility on AMD AM4/AM5 and Intel LGA1200/LGA1700 by staying clear of the memory slots. Topped off with the renowned SecuFirm2™ mounting system, Noctua's award-winning NT-H1 thermal compound and a 6-year manufacturer's warranty, the NH-D12L is the perfect choice for applications that require serious cooling performance but cannot fit the larger NH-U12A.

LOGISTIC DATA

Product name
Noctua NH-D12L

EAN
9010018000337

UPC
841501100338

Packaging dimensions (HxWxD)
236x184x177 mm

Weight incl. packaging
1698 g

Warranty
6 years

Packaging unit
8 pcs

Packaging dimensions / unit (HxWxD)
496x400x378 mm

Weight incl. packaging / unit
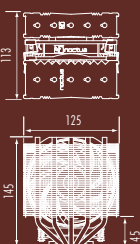14.62 kg

SCOPE OF DELIVERY

NH-D12L Heatsink

NF-A12x25r PWM premium fan

Low-Noise Adaptor (L.N.A.)

NT-H1 thermal compound

SecuFirm2™ mounting kit

145mm height for broader case compatibility
While Noctua's regular 120mm CPU coolers stand 158mm tall, the NH-D12L measures only 145mm. This allows it to fit not only a wide range of 4U rackmount server cases and many tower-style enclosures that are not wide enough for 158mm units, but also some larger Small Form Factor (SFF) and Mini-ITX chassis.

More performance at lower height
Despite its reduced height, the NH-D12L easily outperforms 92mm coolers. It can even surpass renowned 120mm units such as the NH-U12S and often comes close to Noctua's award-winning 120mm flagship model NH-U12A.

100% RAM compatibility on LGA1700/1200 and AM4/AM5
Due to its asymmetric design, the NH-D12L does not overhang the RAM slots on Intel LGA1700 (LGA17xx family)/LGA1200/LGA115x and AMD AM4/AM5 based motherboards, which ensures easy access to the modules and 100% compatibility with DIMMs that feature tall heat-spreaders or RGB lighting. On LGA2066, the rear fin stack will overhang the RAM slots on the left-hand side of the socket, so RAM modules must not exceed 45mm height.

6-year manufacturer's warranty
Noctua products are renowned for their impeccable quality and outstanding longevity. True to this legacy, the NH-D12L heatsink is built to last, and like all Noctua fans, the supplied NF-A12x25r features an MTTF rating of more than 150,000 hours. The entire package comes with a full 6-year manufacturer's warranty.

NH-D12L HEATSINK SPECIFICATIONS

Socket compatibility	AMD AM4, AM5 & Intel LGA1700 (LGA17xx family), LGA1200, LGA115x (LGA1150, LGA1151, LGA1155, LGA1156) and LGA20xx (LGA2066, LGA2011-0 & LGA2011-3 Square ILM)
Dimensions	145x125x113 mm
Weight without fan	700 g
Weight with NF-A12x25r PWM	890 g
Material	Copper (base and heatpipes), aluminium (cooling fins), soldered joints & nickel plating
Fan compatibility	NF-A12x25r PWM (square-frame 120mm fans not supported)

NF-A12x25r PWM FAN SPECIFICATIONS

Dimensions	120x120x25 mm
Connector	4-pin PWM
Bearing	SSO2
Blade geometry	A-Series with Flow Acceleration Channels
Frame technology	AAO
Max. input power	1.68 W
Voltage	12 V
MTTF	> 150,000 h

NF-A12x25r PWM	without adaptor	with L.N.A.
Max. rotational speed (+/−10%)	2000 RPM	1700 RPM
Max. airflow	102.1 m³/h	84.5 m³/h
Max. acoustical noise	22.6 dB(A)	18.8 dB(A)
Max. static pressure	2.34 mmH$_2$O	1.65 mmH$_2$O

113

125

145

45

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