

NH-U12S DX-4189

Noctua NH-U12S DX-4189 U-Type Premium Cooler



Noctua's DX line CPU coolers have become a default choice in premium grade quiet cooling solutions for Intel Xeon processors. The NH-U12S DX-4189 features a larger, custom-designed contact surface for LGA4189 platforms. Based on the proven, 120mm size NH-U12S heatsink and equipped with two of Noctua's award-winning, PWM controlled NF-A12x25 120mm fans, it provides an excellent balance of performance, compatibility and quietness of operation. Topped off with the professional SecuFirm2™ mounting system and pre-applied NT-H1 thermal compound, the NH-U12S DX-4189 forms a complete premium quality package for quietly cooling LGA4189 based Xeon workstations and servers.

DX series for Intel Xeon

First introduced in 2008, Noctua's DX line CPU coolers have become a standard choice when it comes to quiet, premium grade air cooling solutions for Intel Xeon processors. Thanks to their superior acoustic efficiency, they are ideal for workstations and servers that run in noise sensitive environments (e.g. audio/video production, content creation, engineering, etc.).

Customised for LGA4189

The new DX-4189 line coolers are dedicated, customised solutions for Intel's professional LGA4189 platform (Whitley), which makes them an ideal fit for both Ice Lake-SP based 3rd generation Xeon Scalable CPUs (Platinum, Gold, Silver or Bronze) and W-3300 series Xeon processors for workstations (Ice Lake-64L).

LGA4189-4 (P4) CPU carrier frame

The scope of delivery includes an LGA4189-4 (P4) type CPU carrier frame for Intel Ice Lake-SP and Ice Lake-64L based processors (Whitley platform). However, the heatsink's SecuFirm2™ mounting system also supports P5 type LGA4189 sockets (LGA4189-5) for Intel Cooper Lake based processors. CPU carrier frames for LGA4189-5 are available on request via support@noctua.at.

6-year manufacturer's warranty

Noctua products are renowned for their impeccable quality and outstanding longevity. True to this legacy, the NH-U12S DX-4189 heatsink is built to last, and like all Noctua fans, the supplied NF-A12x25 units feature an MTTF rating of more than 150,000 hours. The entire package comes with a full 6-year manufacturer's warranty.

LOGISTIC DATA

Product name
Noctua NH-U12S DX-4189

EAN
9010018000306

UPC
841501100307

Packaging dimensions (HxWxD)
161x227x198 mm

Weight incl. packaging
1592 g

Warranty
6 years

Packaging unit
8 pcs

Packaging dimensions / unit (HxWxD)
345x475x420 mm

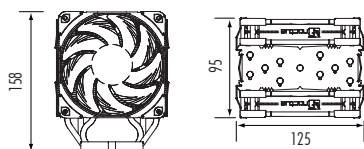
Weight incl. packaging / unit
13.88 kg

SCOPE OF DELIVERY

NH-U12S DX-4189 heatsink
2x NF-A12x25 PWM premium fan
CPU carrier frame for LGA4189-4 (P4)
NM-SMT5 Torx® T30 mounting tool
SecuFirm2™ mounting kit
NT-H1 thermal compound
(pre-applied to the heatsink)

NH-U12S DX-4189 HEATSINK SPECIFICATIONS

Socket compatibility	Intel Xeon LGA4189
Dimensions	158x125x45 mm
Dimensions with 2x NF-A12x25 PWM	158x125x97 mm
Weight	626 g
Weight with 2x NF-A12x25 PWM	1018 g
Material	Copper (base and heatpipes), aluminium (cooling fins), soldered joints & nickel plating
Fan compatibility	120x120x25 mm



NF-A12x25 PWM FAN SPECIFICATIONS

Dimensions	120x120x25 mm
Connector	4-pin PWM
Bearing	SS02
Blade geometry	A-Series with Flow Acceleration Channels
Frame technology	AAO
Max. input power	1.68 W
Voltage	12 V
MTTF	> 150,000 h
Max. rotational speed (+/-10%)	2000 RPM
Max. airflow	102.1 m³/h
Max. acoustical noise	22.6 dB(A)
Max. static pressure	2.34 mm H ₂ O