

NF-A6x25 PWM

Noctua NF-A6x25 PWM Premium Fan



Featuring advanced aerodynamic design measures such as Flow Acceleration Channels and Noctua's AAO frame, the NF-A6x25 is a highly optimised, premium quality quiet fan in 60x25mm size. The PWM version sports Noctua's custom designed NE-FD1 IC for fully automatic speed control via 4-pin fan headers and comes with a Low-Noise-Adaptor to reduce the maximum speed during PWM control from 3000 to 2100rpm. Its superb running smoothness, SSO2 bearing and Noctua's trusted premium quality make it an elite choice for the highest demands.

Reduced Motor Hub Size

Thanks to its streamlined, compact motor design, the NF-A6x25 PWM's motor hub is smaller than with conventional 6cm fans. This allows for more blade surface area and thus contributes to the NF-A6x25 PWM's superior airflow and pressure performance.

Flow Acceleration Channels

The NF-A6x25 PWM impeller features suction side Flow Acceleration Channels. By speeding up the airflow at the crucial outer blade regions, this measure reduces suction side flow separation and thus leads to better efficiency and lower vortex noise.

AAO Frame

Noctua's AAO (Advanced Acoustic Optimisation) frames feature integrated anti-vibration pads as well as Noctua's proprietary Stepped Inlet Design and Inner Surface Microstructures, both of which further refine the fan's performance/noise efficiency.

Stepped Inlet Design

Noctua's Stepped Inlet Design adds turbulence to the influx in order to facilitate the transition from laminar flow to turbulent flow, which reduces tonal intake noise, improves flow attachment and increases suction capacity, especially in space restricted environments.

Inner Surface Microstructures

With the tips of the fan blades ploughing through the boundary layer created by the Inner Surface Microstructures, flow separation from the suction side of the blades is significantly suppressed, which results in reduced blade passing noise and improved airflow and pressure efficiency.

Low-Noise Adaptor

The NF-A6x25 PWM is supplied with a Low-Noise Adaptor (L.N.A.) that reduces the maximum fan speed from 3000 to 2300rpm. The L.N.A. can be used either to run the fan at a fixed speed of 2300rpm or to cap the maximum speed when using automatic PWM control.

Custom designed PWM IC with SCD

Supporting fully automatic PWM speed control, the NF-A6x25 PWM uses Noctua's novel, custom designed NE-FD1 PWM IC that integrates Smooth Commutation Drive (SCD) technology. By providing smoother torque impulses, SCD suppresses PWM switching noises and thus makes the fan quieter at low speeds.

SSO2 Bearing

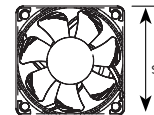
The NF-A6x25 PWM features the further optimised second generation of Noctua's renowned, time-tested SSO bearing. With SSO2, the rear magnet is placed closer to the axis to provide even better stabilisation, precision and durability.

Extensive cabling options

The fan's short 20cm primary cable minimises cable clutter in typical applications while the supplied 30cm extension provides extended reach when necessary. Both cables are fully sleeved and a 4-pin y-cable allows to connect a second fan to the same PWM fan header for automatic control.

6 years manufacturer's warranty

Noctua fans are renowned for their impeccable quality and outstanding longevity. Like all Noctua fans, the NF-A6x25 PWM features an MTTF rating of more than 150,000 hours and comes with a full 6 years manufacturer's warranty.



SPECIFICATIONS

Dimensions	60x60x25 mm	
Bearing	SSO2	
Blade geometry	A-Series with Flow Acceleration Channel	
Max. input power / voltage	0.96 W / 12 V	
MTTF	> 150,000 h	

NF-A6x25 PWM	w/o adaptor	with L.N.A.
Max. rotational speed (+/-10%)	3000 RPM	2300 RPM
Max. airflow	29.2 m³/h	20.9 m³/h
Max. acoustical noise	19.3 dB(A)	12.1 dB(A)
Max. static pressure	2.18 mmH ₂ O	1.08 mmH ₂ O

LOGISTIC DATA

Product name
Noctua NF-A6x25 PWM

EAN
4716123315636

UPC
842431012524

Packaging dimensions (HxWxD)
210x150x34 mm

Weight incl. packaging
195 g

Warranty
6 years

Packaging unit
36 pcs

Packaging dimensions / unit (HxWxD)
395x385x380 mm

Weight incl. packaging / unit
8.90 kg

SCOPE OF DELIVERY

NF-A6x25 PWM premium fan

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

4-pin y-cable

30cm extension cable

4x anti-vibration mounts

4x fan screws