

# NF-A6x25 5V PWM

# Noctua NF-A6x25 5V PWM Premium Fan



Featuring advanced aerodynamic design measures such as Flow Acceleration Channels and an AAO frame, the NF-A6x25 5V PWM is a PWM-enabled 5V variant of Noctua's highly optimised, premium-quality quiet 60x25mm fan. The custom-designed NE-FD1 PWM IC that integrates Smooth Commutation Drive technology and Noctua's reference-class SSO2 bearing guarantee superb running smoothness and excellent long-term stability. Topped off with modular cabling, the OmniJoin™ Adaptor Set and a 6-year manufacturer's warranty, the NF-A6x25 5V PWM is a premium choice for demanding 5V applications that require PWM control.

## 5V PWM version

Many devices, such as network or storage solutions, use 5 volt 60mm fans with PWM speed control. With the same operating voltage, PWM support and the included OmniJoin™ adaptor set that makes it compatible with proprietary fan headers, the NF-A6x25 5V PWM is ideal for replacing noisy or broken 5V 60mm fans with PWM.

## Polarity protection

As many devices using 5V fans feature proprietary connectors and documentation of the pin alignment may not be available, the fan features an integrated diode for polarity protection. This way, you're on the safe side if you accidentally connect it with reverse polarity.

## Reduced Motor Hub Size

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

## 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.

## Flow Acceleration Channels

The NF-A6x25 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.

## 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.

## Custom-designed PWM IC with SCD

Supporting fully automatic PWM speed control, the fan uses Noctua's custom-designed NE-FD3 5V 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 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 the connection of a second fan to the same PWM fan header for automatic control.

## OmniJoin™ Adaptor Set

Many devices featuring 60mm fans use proprietary fan headers, so the NF-A6x25 5V PWM comes with Noctua's OmniJoin Adaptor Set. Just cut the original fan's cable, fix it to the adaptor using the supplied cable connectors and you can plug the NF-A6x25 5V PWM to proprietary fan headers!

## SPECIFICATIONS

Dimensions	60x60x25 mm
Bearing	SSO2
Connector	4-pin
Blade geometry	A-Series with Flow Acceleration Channels
Max. input power / voltage	1.3 W / 5 V
MTTF	> 150,000 h
NF-A6x25 5V PWM	
w/o adaptor	
Max. rotational speed (+/-10%)	3000 RPM
Max. airflow	29.2 m³/h
Max. acoustical noise	19.3 dB(A)
Max. static pressure	2.18 mmH <sub>2</sub> O

Designed in Austria, Noctua's premium cooling components are internationally renowned for their superb quietness, exceptional performance and thoroughgoing quality. Having received more than 6000 awards and recommendations from leading hardware websites and magazines, Noctua's fans and heatsinks are serving hundreds of thousands of satisfied customers around the globe.

