

# NF-A4x20 5V PWM

# Noctua NF-A4x20 5V PWM Premium Fan



Featuring advanced aerodynamic design measures such as Flow Acceleration Channels and an AAO frame, the NF-A4x20 5V PWM is a PWM enabled 5V variant of Noctua's highly optimised, premium quality quiet 40x20mm fan. The custom designed NE-FD1 PWM IC that integrates Smooth Commutation Drive technology and Noctua's reference class SSO2 bearings guarantee superb running smoothness and excellent long-term stability. Topped off with modular cabling, the OmniJoin™ Adaptor Set and 6 years manufacturer's warranty, the NF-A4x20 5V PWM is a premium choice for demanding 5V applications that require PWM control.

#### 40x20mm size

Compared to Noctua's award-winning NF-A4x10, the NF-A4x20 is twice as thick, which allows for increased static pressure performance and makes the NF-A4x20 ideal for demanding applications with high flow resistance.

#### 5V PWM version

Many devices such as network or storage solutions use 5 volt 40mm 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-A4x20 5V PWM is ideal for replacing noisy or broken 5V 40mm fans with PWM.

#### 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.

#### 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.

#### 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.

#### SSO2 bearing

The NF-A4x20 5V 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.

#### Flow Acceleration Channels

The NF-A4x20 5V 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.

#### OmniJoin Adaptor Set

Many devices featuring 40mm fans use proprietary fan headers, so the NF-A4x20 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-A4x20 5V PWM to proprietary fan headers!

#### Integrated anti-vibration pads

Integrated Anti-Vibration Pads made from extra-soft silicone minimise the transmission of minute vibrations while maintaining full compatibility with all standard mounting systems and fan clips used on heatsinks.

#### 6-year manufacturer's warranty

Noctua fans are renowned for their impeccable quality and outstanding longevity. Like all Noctua fans, the NF-A4x20 5V PWM features an MTTF of more than 150,000 hours rating and comes with a full 6-year manufacturer's warranty.

*Being a 5V fan, the NF-A4x20 5V PWM cannot be run at 12V and will be damaged when used with typical 12V power sources such as PC motherboard fan headers.*

#### LOGISTIC DATA

Product name  
Noctua NF-A4x20 5V PWM

EAN  
9010018100136

UPC  
841500110130

Packaging dimensions (HxWxD)  
210x150x34 mm

Weight incl. packaging  
180 g

Warranty  
6 years

Packaging unit  
40 pcs

Packaging dimensions / unit (HxWxD)  
395x380x380 mm

Weight incl. packaging / unit  
9.00 kg

#### SCOPE OF DELIVERY

NF-A4x20 5V PWM premium fan

OmniJoin Adaptor

4-pin y-cable

30cm extension cable

4x anti-vibration mounts

4x fan screws



#### SPECIFICATIONS

Dimensions	40x40x20 mm
Bearing	SSO2
Connector	4-pin
Blade geometry	A-Series with Flow Acceleration Channels
Max. input power / voltage	0.5 W / 5 V
MTTF	> 150,000 h

NF-A4x20 5V PWM	w/o adaptor
Max. rotational speed (+/-10%)	5000 RPM
Max. airflow	9.4 m³/h
Max. acoustical noise	14.9 dB(A)
Max. static pressure	2.26 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.

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