NF-A8 PWM

Noctua NF-A8 PWM Premium Fan





The NF-A8 is a highly optimised, premium quality quiet 80mm fan. Featuring Noctua's AAO (Advanced Acoustic Optimisation) frame as well as sophisticated aerodynamic design measures such as Flow Acceleration Channels, the NF-A8 further improves the renowned quiet cooling performance of the award-winning NF-R8. 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 2200 to 1750rpm. Its superb running smoothness, reference-class SSO2 bearing and Noctua's trusted premium quality make it an elite choice for the highest demands.

LOGISTIC DATA

Product name	Noctua NF-A8 PWM
EAN	4716123315476
UPC	842431014436
Packaging dimensions (HxWxD)	210x150x34 mm
Weight incl. packaging	245 g
Warranty	6 years
Packaging unit	40 pcs
Packaging dimensions / unit (HxWxD)	390 x 370 x 360 mm
Weight incl. packaging / unit	11.30 kg

SCOPE OF DELIVERY

- NF-A8 PWM premium fan
- Low-Noise Adaptor (L.N.A.)
- 4-pin y-cable
- 30cm extension cable
- 4x anti-vibration mounts
- 4x fan screws

Succeeding the award-winning NF-R8

Noctua's NF-R8 fan has become a default-choice among PC enthusiasts looking for a premium quality quiet 80mm fan. Thanks to its thoroughgoing aerodynamic optimisations, the NF-A8 provides higher static pressure and an even better airflow/noise ratio than its much acclaimed predecessor.

Flow Acceleration Channels

The NF-A8 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.

Innner 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-A8 PWM is supplied with a Low-Noise Adaptor (L.N.A.) that reduces the maximum fan speed from 2200 to 1750rpm. The L.N.A can be used either to run the fan at a fixed speed of 1750rpm or to cap the maximum speed when using automatic PWM control.

SSO2 Bearing

The NF-A8 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.

Custom designed PWM IC with SCD

Supporting fully automatic PWM speed control, the NF-A8 PWM uses Noctua's 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.

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-A8 PWM features an MTTF rating of more than 150,000 hours and comes with a full 6 years manufacturer's warranty.

SPECIFICATIONS

Dimensions	80x80x25 mm
Bearing	SSO2
Blade geometry	Optimized Seven Blade Design with
Max. input power / voltage	0.96 W / 12 V
MTTF	> 150,000 h

NF-A8 PWM	w/o adaptor	with L.N.A.
Max. rotational speed (+/–10%)	2200 RPM	1750 RPM
Max. airflow	55.5 m^3/h	43.9 m^3/h
Max. acoustical noise	17.7 dB(A)	13.8 dB(A)
Max. static pressure	2.37 mmH_2O	1.54 mmH_2O

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.