Noctua NF-F12 PWM Premium Fan







LOGISTIC DATA

Product name
Noctua NF-F12 PWM
EAN
4716123314660
UPC
842431014009
Packaging dimensions (HxWxD)
150x210x33 mm
Weight incl. packaging
314 g
Warranty
6 years
Packaging unit
36 pcs
Packaging dimensions / unit (HxWxD)
390x390x360 mm
Weight incl. packaging / unit
13.52 kg

SCOPE OF DELIVERY

NF-F12 PWM premium fan
Low-Noise Adaptor (L.N.A.)
4-pin y-cable
30cm extension cable
4x anti-vibration mounts
4x fan screws

Teaming up eleven stator guide vanes with a specially conceived seven blade impeller, the NF-F12's Focused Flow system creates outstanding static pressure and focuses the airflow for superior performance on heatsinks and radiators. At the same time, a wide range of advanced aerodynamic design measures, second generation SSO-Bearing and Noctua's new, custom designed PWM IC for fully automatic control guarantee astounding quietness of operation. The NF-F12 comes with modular cabling, integrated anti-vibration pads and two speed settings for full flexibility. Its commanding performance, exhaustive set of features and Noctua's trusted premium quality make it an elite choice for use on air coolers, radiators and other pressure demanding applications.

Focused Flow[™] frame

Designed for pressure demanding applications such as heatsinks and radiators, the Focused Flow $^{\text{TM}}$ frame features eleven stator guide vanes that straighten, channel and focus the airflow, which allows the NF-F12 to rival the performance of conventional fans running at much faster speeds.

Varying Angular Distance and Vortex Control Notches

The NF-F12's stator guide vanes are set out in Varying Angular Distance and feature Vortex-Control Notches. Both measures help to spread the noise emission over a broader frequency spectrum and thus make the fan's sound pattern more agreeable to the human ear.

Heptaperf[™] Impeller

Custom designed for the new Focused Flow TM frame and to work in tandem with the eleven stator guide vanes, the NF-F12's seven blade Heptaperf TM impeller has been carefully optimised to achieve a perfect balance between power and quietness.

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.

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 screws and other mounting systems.

Low-Noise Adaptor

The NF-F12 is supplied with a (L.N.A.) that reduces the maximum fan speed from 1500 to 1200rpm. The L.N.A. can be used either to run the fan at a fixed speed of 1200rpm or to cap the maximum speed when using automatic PWM control.

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 NF-F12 fan to the same PWM fan header for automatic control.

6-year manufacturer's warranty

Noctua fans are renowned for their impeccable quality and outstanding longevity. Like all Noctua fans, the NF-F12 features an MTTF rating of more than 150,000 hours and comes with a full 6-year manufacturer's warranty.



SPECIFICATIONS

Dimensions	120x120x25 mm
Bearing	SSO2-Bearing
Blade geometry	Heptaperf™
Frame Technology	Focused Flow™
Max. input power / voltage	0.6 W / 12 V
MTTF	> 150,000 h

NF-F12 PWM	w/o adaptor	with L.N.A.
Max. rotational speed ($+/-10\%$)	1500 RPM	1200 RPM
Max. airflow	93.4 m³/h	74.3 m³/h
Max. acoustical noise	22.4 dB(A)	18.6 dB(A)
Max. static pressure	2.61 mmH ₂ 0	1.83 mmH ₂ 0

