

# NF-A14 PWM

## Noctua NF-A14 PWM Premium Fan



### LOGISTIC DATA

Product Name	Noctua NF-A14 PWM
EAN-No.	471612331498-1
UPC-No.	84243101433-7
Dimensions (HxWxD)	242 x 174 x 37 mm
Weight	370 gr
Warranty	6 years
UVP	21.90 EUR
Packaging Unit	40 Pcs.
Dimensions / Unit (HxWxD)	440 x 400 x 390 mm
Weight / Unit	15.2 kg

### SCOPE OF DELIVERY

NF-A14 PWM 140mm Premium Fan
Low-Noise Adaptor (L.N.A.)
4-Pin Y-Cable
30cm Extension Cable
4 Vibration-Compensators
4 Fan Screws

The NF-A14 is a premium quality quiet 140mm fan with a square frame that complies with Noctua's AAO (Advanced Acoustic Optimisation) standard. Its square shape and 140mm mounting holes (124.5mm spacing) make it ideal for use on watercooling radiators or as an upgrade for 140mm case fans. Featuring sophisticated aerodynamic design measures such as Flow Acceleration Channels, the NF-A14 further improves the renowned quiet cooling performance of the award-winning NF-P14. 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 1500rpm to 1200rpm. Its performance-oriented 1500rpm top speed and comprehensive speed control options make the NF-A14 PWM an elite choice for users who strive to strike a perfect balance between excellent cooling capacity and superb quietness of operation, be it on watercooling radiators, on heatsinks or in case ventilation.

### Succeeding the award-winning NF-P14

Noctua's NF-P14 fan has become a default-choice among PC enthusiasts looking for a premium quality quiet 140mm fan. Thanks to its thoroughgoing aerodynamic optimisations, the NF-A14 provides higher static pressure and an even better airflow/noise ratio than its much acclaimed predecessor.

### Square 140mm frame

The NF-A14's square 140mm frame with 140mm mounting holes (124.5mm spacing) makes it a premium grade replacement for common 140mm case fans and perfect for use on 140mm water cooling radiators, where its square shape will ensure full coverage and best pressure performance.

### Flow Acceleration Channels

The NF-A14 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.

### Custom designed PWM IC with SCD

Supporting fully automatic PWM speed control, the NF-A14 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.

### 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.

### Low-Noise Adaptor

The NF-A14 PWM is supplied with a Low-Noise Adaptor (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.

### 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.

### 6 years manufacturer's warranty

Noctua fans are renowned for their impeccable quality and outstanding longevity. Like all Noctua fans, the NF-A14 features an MTBF of more than 150.000 hours rating and comes with a full 6 years manufacturer's warranty.

### SPECIFICATIONS

Size	140 x 140 x 25 mm	
Bearing	SS02-Bearing	
Blade Geometry	A-Series with Flow Acceleration Channels	
Max. Input Power/Operating Voltage	1.56 W/12V	
MTBF	> 150.000 h	

NF-A14 PWM	w/o Adaptor	with L.N.A.
Max. Rotational Speed (+/-10%)	1500 RPM	1200 RPM
Max. Airflow	140.2 m³/h	115.5 m³/h
Max. Acoustical Noise	24.6 dB(A)	19.2 dB(A)
Max. Static Pressure	2.08 mmH2O	1.51 mmH2O