

# NF-S12A ULN

## Noctua NF-S12A ULN Premium Fan



The NF-S12A marks the third generation of Noctua's signature S12 series quiet case fans, which have received more than 250 awards and recommendations from the international press. Featuring a further refined blade design with Anti-Stall Knobs that works in tandem with the new AAO (Advanced Acoustic Optimisation) frame, the NF-S12A improves the airflow/noise efficiency of its renowned predecessor by up to 8%. The ULN version provides super-slow 800/600rpm speed settings for ultra-low-noise applications and highly noise sensitive users who demand near-silent operation. Its superb running smoothness, SSO2 bearing and Noctua's trusted premium quality make it an elite choice for quiet case cooling.

### Anti-Stall Knobs

The NF-S12A's Anti-Stall Knobs reduce flow separation phenomena in medium to high impedance situations and thereby increase the fan's stall margin. This means that the NF-S12A ULN is even more versatile than its renowned predecessor and can achieve better performance on heatsinks and radiators.

### Flow Acceleration Channels

The NF-S12A ULN 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

### 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.

### SSO2 Bearing

The NF-S12A ULN 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.

### 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.

### Smooth Commutation Drive 2

The latest version of Noctua's advanced Smooth Commutation Drive system ensures superb running smoothness by eliminating torque variations and switching noises. This makes the NF-S12A remarkably quiet even at very close distance.

### 2 speed settings for maximum quietness

Providing 800 and 600 rpm speed settings via the supplied adaptor, the ULN (Ultra-Low-Noise) version is tailor made for serious silent enthusiasts who demand super-slow running speeds and utmost quietness of operation.

### 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 the supplied 3:4 pin adaptor allows to connect the fan directly to the power supply.

### 6 years manufacturer's warranty

Noctua fans are renowned for their impeccable quality and outstanding longevity. Like all Noctua fans, the NF-S12A ULN features an MTBF of more than 150.000 hours rating and comes with a full 6 years manufacturer's warranty.

### SPECIFICATIONS

Size	120 x 120 x 25 mm	
Bearing	SSO2-Bearing	
Blade Geometry	S-Series with Anti-Stall Knobs	
Max. Input Power//Operating Voltage	0.72 W/12V	
MTBF	> 150.000 h	

NF-S12A ULN	w/o Adaptor	with L.N.A.
Max. Rotational Speed (+/-10%)	800 RPM	600 RPM
Max. Airflow	74.3 m <sup>3</sup> /h	57.5 m <sup>3</sup> /h
Max. Acoustical Noise	8.6 dB(A)	6.7 dB(A)
Max. Static Pressure	0.62 mmH2O	0.44 mmH2O

### LOGISTIC DATA

Product Name	Noctua NF-S12A ULN
EAN-No.	471612331491-2
UPC-No.	84243101424-5
Dimensions (HxWxD)	212 x 152 x 37 mm
Weight	280 gr
Warranty	6 years
MSPR	19.90 EUR
Packaging Unit	40 Pcs.
Dimensions / Unit (HxWxD)	390 x 390 x 360 mm
Weight / Unit	12 kg

### SCOPE OF DELIVERY

NF-S12A ULN 120mm Premium Fan
Low-Noise Adaptor (L.N.A.)
3:4 Pin Adaptor
30cm Extension Cable
4 Vibration-Compensators
4 Fan Screws