

# NF-A20 PWM

## Noctua NF-A20 PWM Premium Fan



### LOGISTIC DATA

|                                     |                   |
|-------------------------------------|-------------------|
| Product name                        | Noctua NF-A20 PWM |
| EAN                                 | 9010018100013     |
| UPC                                 | 841501110016      |
| Packaging dimensions (HxWxD)        | 285x285x38 mm     |
| Weight incl. packaging              | 705 g             |
| Warranty                            | 6 years           |
| Packaging unit                      | 10 pcs            |
| Packaging dimensions / unit (HxWxD) | 315x300x420 mm    |
| Weight incl. packaging / unit       | 8.10 kg           |

### SCOPE OF DELIVERY

|                                 |
|---------------------------------|
| NF-A20 PWM premium fan          |
| Low-Noise Adaptor (L.N.A.)      |
| 4-pin y-cable                   |
| 30cm extension cable            |
| 4x NA-AV3 anti-vibration mounts |
| 4x NA-AV4 anti-vibration mounts |
| 4x fan screws                   |



The NF-A20 PWM is a highly optimised, premium quality quiet 200mm fan. Featuring an AAO (Advanced Acoustic Optimisation) standard frame as well as sophisticated aerodynamic design measures such as Flow Acceleration Channels, the NF-A20 PWM brings the renowned quiet cooling performance of Noctua's award-winning A-series to the increasingly popular 20cm form factor. The PWM version uses Noctua's custom designed NE-FD1 IC for fully automatic speed control via 4-pin fan headers, which allows it to strike a perfect balance between quietness and ventilation performance in each given situation.

#### Award-winning Noctua quality in 20cm size

While more and more PC cases support 20cm intake, side-panel or exhaust fans, many of the bundled stock units and available aftermarket options are of questionable quality. By contrast, the NF-A20 PWM is a true premium grade solution worthy of Noctua's award-winning A-series.

#### 154mm, 110x180mm and 170mm hole spacing

In order to ensure broad compatibility with today's PC cases, the NF-A20 PWM features three sets of mounting holes: While the 154x154mm and 110x180mm spacing allow it to replace most 200mm fans, the 170x170mm spacing is used by many 230 and 250mm fans, which can thus also be replaced by the NF-A20 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.

#### Flow Acceleration Channels

The NF-A20 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.

#### 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.

#### Custom designed PWM IC with SCD

Supporting fully automatic PWM speed control, the NF-A20 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.

#### 6-year manufacturer's warranty

Noctua fans are renowned for their impeccable quality and outstanding longevity. Like all Noctua fans, the NF-A20 PWM features an MTTF of more than 150,000 hours rating and comes with a full 6-year manufacturer's warranty.

*\*As there is no fixed industry standard for the size or hole spacing of 200mm, 220mm, 230mm or 250mm fans, please carefully check both the hole setup of your chassis and the available space (the NF-A20 PWM is 30mm thick whereas some other 200mm fans are only 20mm!) in order to verify that the NF-A20 PWM is compatible with your chassis. In case of doubt, please contact our customer support (support@noctua.at) and comes with a full 6-year manufacturer's warranty.*

### SPECIFICATIONS

|                            |  |
|----------------------------|--|
| Dimensions                 | 200x200x30 mm                            |
| Bearing                    | SS02                                     |
| Connector                  | 4-pin                                    |
| Blade geometry             | A-Series with Flow Acceleration Channels |
| Max. input power / voltage | 0.96 W / 12 V                            |
| MTTF                       | > 150,000 h                              |

| NF-A20 PWM                     | w/o adaptor             | with L.N.A.             |
|--------------------------------|-------------------------|-------------------------|
| Max. rotational speed (+/-10%) | 800 RPM                 | 550 RPM                 |
| Max. airflow                   | 146.9 m³/h              | 100.8 m³/h              |
| Max. acoustical noise          | 18.1 dB(A)              | 10.7 dB(A)              |
| Max. static pressure           | 1.08 mmH <sub>2</sub> O | 0.51 mmH <sub>2</sub> O |