

AD5024UB-D7F ADDA 24V 0.12A 50mm DC Axial Fan

SKU: AD5024UB-D7F

Price: \$9.99

Categories: Fans

Tags: ADDA

Product Link:

<https://www.electspares.com/product/ad5024ub-d7f-adda-24v-0-12a-50mm-dc-axial-fan/>

Product Description

The ADDA AD5024UB-D7F is a high-performance compact DC Axial Fan with dimensions of 50 x 50 x 15 mm. Driven by a precision Brushless DC Motor, this 5015 series model is engineered as an intelligent localized cooling solution operating on a nominal 24 VDC. It delivers a reliable maximum airflow of 14 CFM (23.8 m³/h) at a rated speed of 5500 RPM. With a rated current of 0.12 A and a power input of 2.88 W, it is specifically designed to provide steady thermal regulation for power electronics in space-constrained industrial environments. This specialized 4-wire version includes both a tachometer signal for monitoring and a PWM input for precise variable speed control. Featuring a premium dual-ball bearing system and a 7-blade aerodynamic impeller, the AD5024UB-D7F provides mission-critical durability (70,000 h @ 40 °C) for industrial inverters, localized hot-spot cooling on driver boards, and compact power modules.

AD5024UB-D7F Fan Parameters

Manufacturer: ADDA

Model Number: AD5024UB-D7F

Motor Design: Brushless DC Motor

Type: DC Axial Fan (4-Wire PWM Series)

Dimensions: 50 x 50 x 15 mm

Impeller Size: 44 mm

Nominal Voltage: 24 VDC

Operating Voltage Range: 20.4 to 27.6 VDC

Starting Voltage: 16.0 VDC

Speed: 5500 RPM

Power Input: 2.88 W

Rated Current: 0.12 A

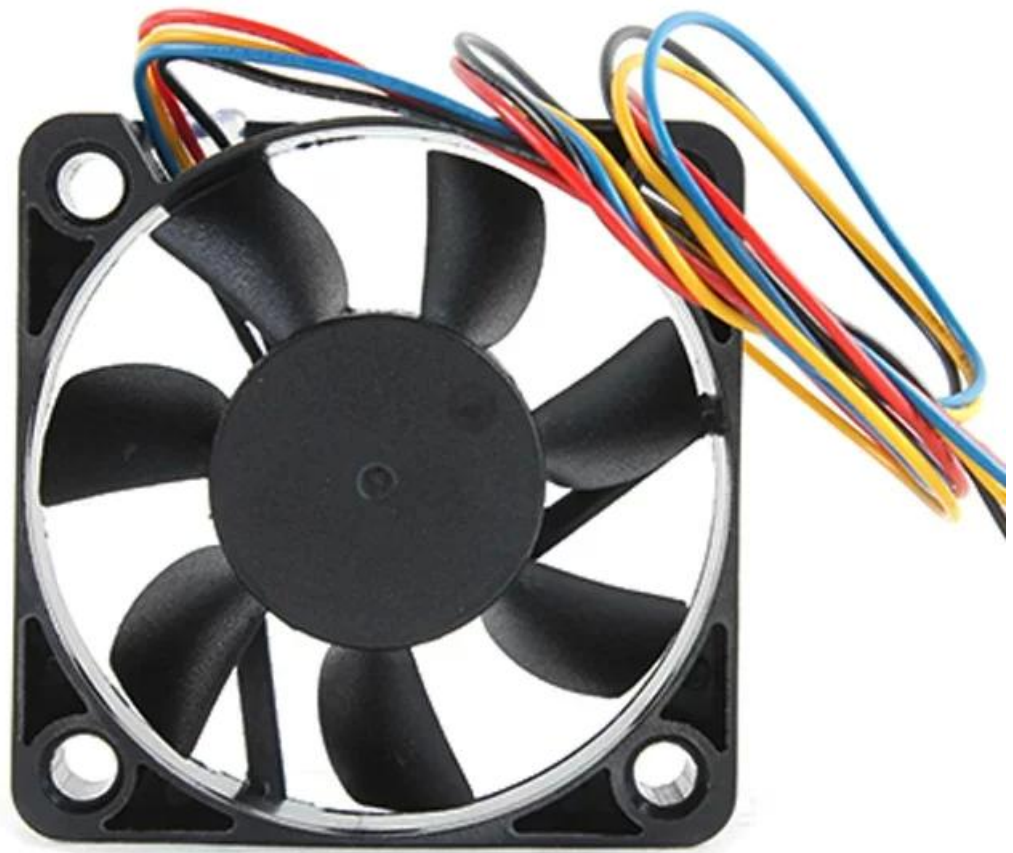
Max. Airflow: 14 CFM (23.8 m³/h)
Max. Static Pressure: 42.3 Pa (0.17 inAq)
Noise Level: 37 dB(A)
Weight: 27 g
Termination: 4 Wire Leads (Red: +, Black: -, Yellow: Tacho, Blue: PWM)
Lead Wire Length: 200 mm (26 AWG)
Bearing Type: Dual Ball Bearing
Housing Material: Plastic (UL 94V-0 PBT)
Impeller Material: Plastic (UL 94V-0 PBT)
Number of Blades: 7
Direction of Rotation: Clockwise (viewed toward rotor)
Direction of Airflow: Struts Side Out (Exhaust)
Degree of Protection: IP20
Insulation Class: A
Dielectric Strength: 500 VAC / 1 min
Insulation Resistance: 10M Ω or over with a DC500V Megger
Operating Temp. Range: -10 °C to +70 °C
Storage Temp. Range: -40 °C to +70 °C
Life Expectancy (L10) at 40 °C: 70,000 h
Control Signal: PWM Speed Control
Signal Output: Tacho signal (FG)
Safety Protections: Auto-restart, Polarity protection, Locked-rotor protection
Approvals: CE, UL, TUV, CSA

Application

The AD5024UB-D7F is primarily utilized as a specialized inverter cooling fan for localized heat dissipation in frequency drives and high-density power modules. Its 15 mm slim profile is a critical design choice for mounting within the restricted internal cavities of inverter cabinets, where it is often used to cool IGBT gate drivers or internal control power supplies. The 4-wire configuration allows the inverter's control logic to use PWM signals to dynamically adjust the fan speed based on real-time temperature, reducing energy consumption and noise during low-load periods. The 5500 RPM operation generates 0.17 inAq of static pressure, sufficient for forcing air through secondary heat sinks, while the dual-ball bearing system ensures a service life of 70,000 hours, ensuring the operational stability of mission-critical 24V industrial automation and power systems.

Product Images







Scan for product details:

