

Antec GSK850 V2 US

ANTEC GSK850 V2 ATX3.1 850W Full Modular PSU User Manual

Model: GSK850 V2 US

1. INTRODUCTION

Thank you for choosing the Antec GSK850 V2 ATX3.1 850W Full Modular Power Supply Unit. This PSU is designed to provide stable and efficient power to your personal computer, meeting the latest ATX3.1 and PCIe 5.1 standards. It features 80 PLUS Gold certification for high energy efficiency, a PhaseWave Design (LLC + DC-DC) for stable output, and a Zero RPM Manager for quiet operation. The high-quality braided cables ensure durability and a clean build.



Figure 1.1: Antec GSK850 V2 850W Full Modular Power Supply Unit.

2. SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating this power supply unit. Failure to do so may result in personal injury or damage to the product and other components.

- **Electrical Hazard:** Do not open the PSU casing. High voltages are present inside, even when the unit is unplugged. There are no user-serviceable parts inside.
- **Ventilation:** Ensure adequate airflow around the PSU. Do not block ventilation openings.
- **Environment:** Operate the PSU in a dry, well-ventilated environment. Avoid extreme temperatures, humidity, and dust.
- **Power Source:** Connect the PSU only to a grounded power outlet with the correct voltage and frequency as specified on the unit's label.
- **Cables:** Use only the modular cables provided with the PSU. Using third-party cables may cause damage.
- **Installation:** Ensure all cables are securely connected before powering on the system.
- **CircuitShield Protection:** This PSU includes comprehensive industrial-grade protection (OCP, OVP, UVP, SCP, OPP, OTP, SIP, NLO) to safeguard your system. However, these protections are not a substitute for proper installation and handling.

3. PACKAGE CONTENTS

Verify that all items listed below are present in your package. If any items are missing or damaged, please contact your retailer or Antec support.

- Antec GSK850 V2 850W Full Modular Power Supply Unit
- Modular Cable Set (including 12V-2x6 GPU cable for PCIe 5.1)
- AC Power Cord
- Mounting Screws
- User Manual (this document)

4. SETUP AND INSTALLATION

Follow these steps to properly install your Antec GSK850 V2 PSU into your computer system.

4.1. Preparation

1. Ensure your computer is completely powered off and unplugged from the wall outlet.
2. Open your computer case to access the PSU mounting area.
3. If replacing an existing PSU, carefully disconnect all cables from the old unit and remove it.

4.2. PSU Installation

1. Position the Antec GSK850 V2 PSU into the designated PSU bay in your computer case. Ensure the fan is oriented correctly for optimal airflow (typically facing downwards if there's a bottom vent, or upwards if not).
2. Secure the PSU to the case using the provided mounting screws.
3. Due to its compact size, this PSU is designed to fit a wide range of computer cases.

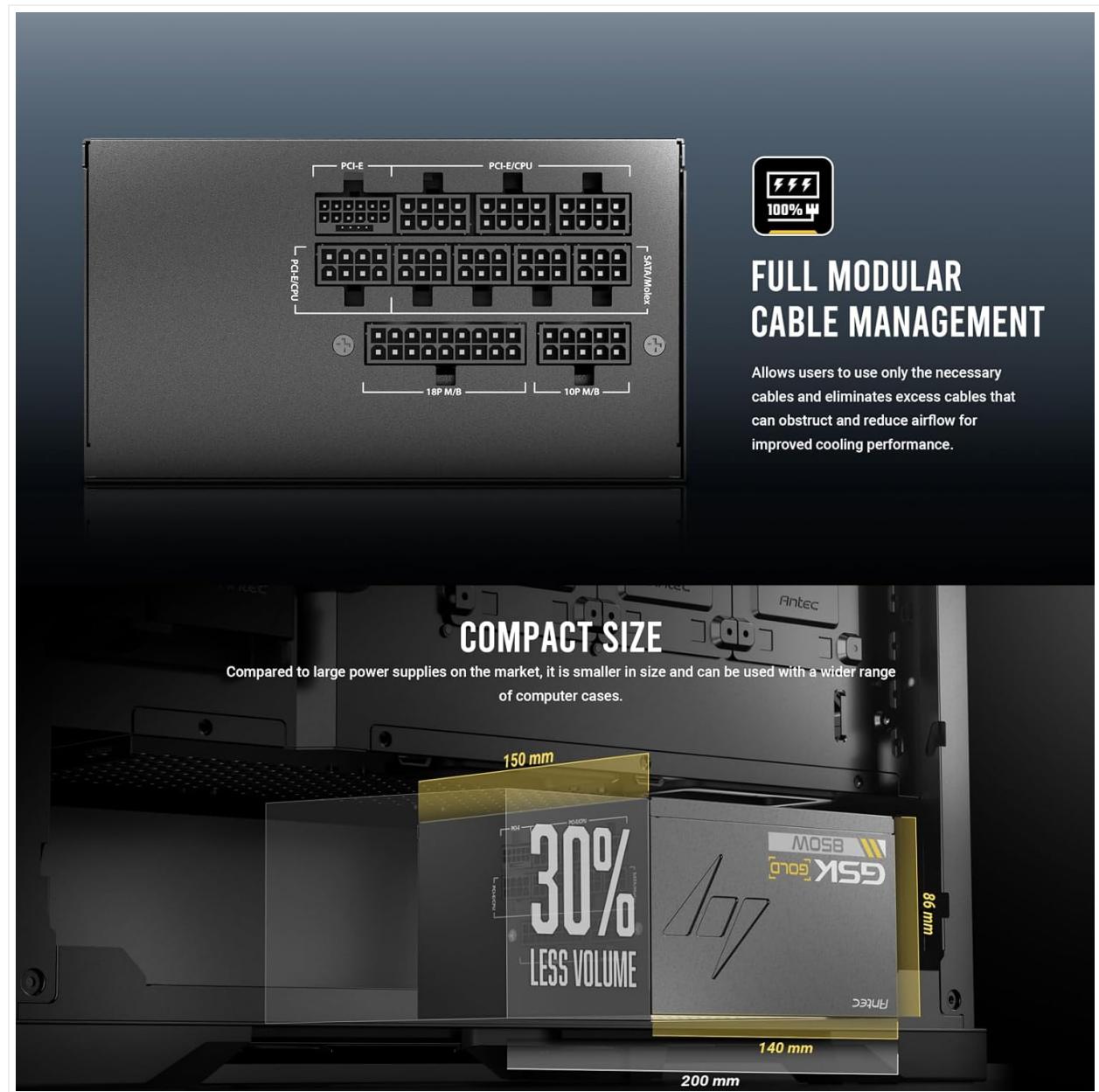


Figure 4.1: Compact size for broad compatibility and full modular cable management.

4.3. Cable Connection

The GSK850 V2 is a full modular PSU, allowing you to connect only the cables necessary for your system, which improves airflow and cable management.

1. Connect the required modular cables to the corresponding ports on the PSU. Refer to the diagram below for cable types and connectors.
2. Connect the other end of each cable to the appropriate component (motherboard, CPU, GPU, SATA devices, etc.).
3. Ensure the 12V-2x6 GPU cable is used for PCIe 5.1 compatible graphics cards. This PSU is ATX3.1 and PCIe 5.1 compatible.

ATX 3.1 & PCIe 5.1 COMPATIBLE

Our new GSK ATX3.1 power supplies are formally certified for ATX 3.1 compliance, meeting the high standards for reliability and power efficiency, and ensuring the utmost level of quality and performance.

The included PCIe 5.1 12V-2x6 GPU cable enables seamless compatibility with the latest graphics cards, such as the NVIDIA® GeForce RTX™ 50 Series.



Figure 4.2: ATX 3.1 and PCIe 5.1 compatibility with dedicated 12V-2x6 GPU cable.

4. The high-quality braided cables offer enhanced durability and a cleaner aesthetic.

HIGH-QUALITY BRAISED CABLE

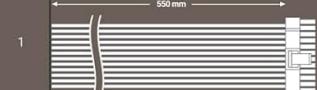
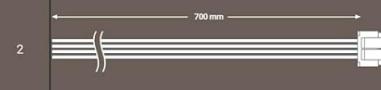
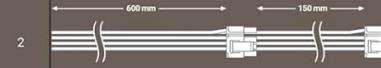
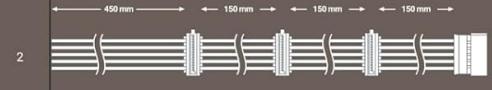
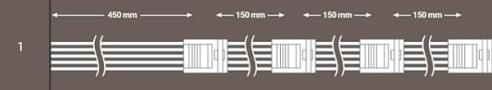
Cables with braided sleeving are more durable compared to standard rubber-coated ones. They can withstand bending and pulling, and are less likely to get tangled or twisted. Braided cables also enhance the visual appeal when paired with a PC case, making cable management easier and cleaner.



Figure 4.3: Illustration of the high-quality braided cables.

5. Refer to the table and image below for a detailed overview of the included cables and connectors:

CABLES

QTY	Cable Length	Cable Type	Connector(s) Per Cable
1		24(20+4)pin M/B	1
1		16(12+4)pin PCI-E 5.1 12V-2x6(600W)	1
2		8(4+4)pin CPU	1
2		8(6+2)pin PCI-E	2
2		SATA	4
1		Molex	4

CONNECTORS

					
24-pin M/B Connectors x1	16-pin PCI-E 5.1 12V-2x6(600W) x1	8(4+4)pin CPU Connectors x2	8(6+2)pin PCI-E Connectors x4	SATA Connectors x8	Molex Connectors x4

Figure 4.4: Detailed view of included cables and connectors.

Table 4.1: Cable and Connector Specifications

Quantity	Cable Type	Cable Length	Connectors Per Cable
1	24(20+4)pin M/B	500mm	1
1	16(12+4)pin PCIe 5.1 12V-2x6 (600W)	500mm	1
2	8(4+4)pin CPU	750mm	1
2	8(6+2)pin PCI-E	600mm + 150mm	2
2	SATA	450mm + 150mm + 150mm + 150mm	4
1	Molex	450mm + 150mm + 150mm + 150mm	4

- Organize cables neatly within your case for optimal airflow and aesthetics.

4.4. Final Steps

- Close your computer case.
- Connect the AC power cord to the PSU and then to a grounded wall outlet.

3. Flip the power switch on the PSU to the "ON" position.
4. Power on your computer.

5. OPERATING INSTRUCTIONS

The Antec GSK850 V2 PSU is designed for efficient and quiet operation.

5.1. Zero RPM Manager

This PSU features a Zero RPM fan mode. In this mode, the 120mm silent fan remains off under low to moderate loads, ensuring silent operation. The thermal sensors activate the fan only when necessary, typically under higher power loads, to maintain optimal cooling and extend the PSU's lifespan.

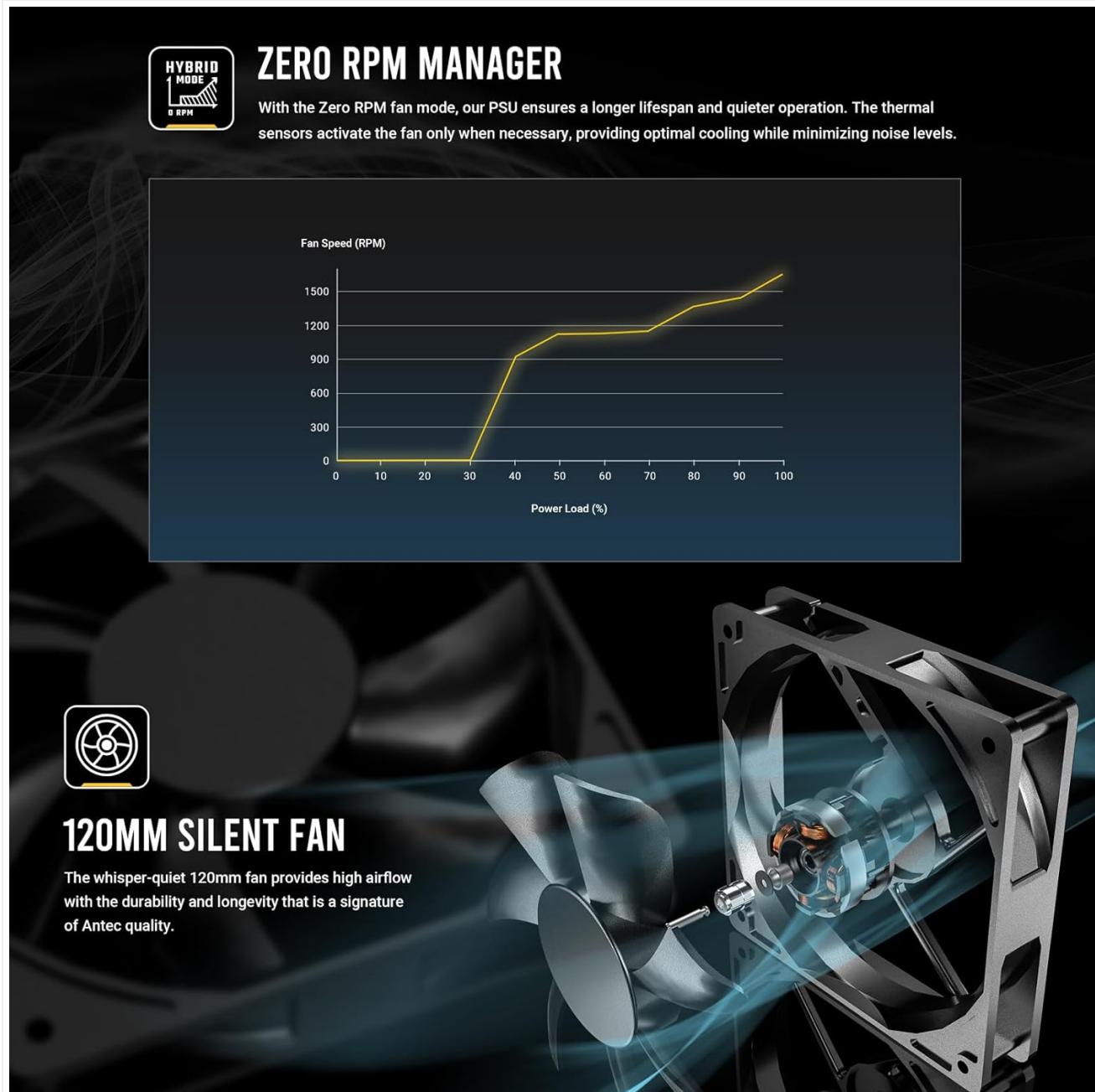


Figure 5.1: Zero RPM Manager fan curve and 120mm silent fan illustration.

5.2. Power On/Off

- To power on your system, ensure the PSU's main power switch is in the "ON" position, then press your computer's power button.
- To power off your system, shut down your operating system normally. For complete power disconnection, flip

the PSU's main power switch to the "OFF" position and unplug the AC power cord.

6. MAINTENANCE

Proper maintenance can extend the lifespan of your PSU and ensure optimal performance.

- **Cleaning:** Periodically clean the exterior of the PSU and the fan intake/exhaust vents using compressed air to remove dust buildup. Ensure the PSU is powered off and unplugged before cleaning.
- **Cable Management:** Regularly check that all modular cables are securely connected and not obstructing airflow within the case.
- **Environment:** Maintain a clean, dry, and well-ventilated environment for your computer system.

7. TROUBLESHOOTING

If you encounter issues with your Antec GSK850 V2 PSU, refer to the following common troubleshooting steps.

7.1. No Power / System Not Turning On

- **Check Power Connections:** Ensure the AC power cord is securely plugged into both the PSU and the wall outlet. Verify the PSU's main power switch is in the "ON" position.
- **Internal Connections:** Confirm that the 24-pin motherboard cable, 8-pin CPU cable, and all other necessary modular cables are firmly connected to both the PSU and the respective components.
- **Wall Outlet:** Test the wall outlet with another device to ensure it is providing power.
- **Power Button/Front Panel:** Ensure your case's front panel connectors (especially the power switch) are correctly connected to the motherboard.

7.2. System Instability / Random Shutdowns

- **Overload:** Ensure your system's power requirements do not exceed the PSU's 850W capacity.
- **Overheating:** Check for proper ventilation within your PC case. Ensure the PSU fan is not obstructed and is operating when under load.
- **Loose Connections:** Re-seat all power cables to ensure they are making proper contact.
- **Component Issues:** Instability can also be caused by other components (RAM, GPU, CPU). If the PSU seems fine, test other components.

7.3. Fan Noise

- **Zero RPM Mode:** The fan may not spin under low loads. This is normal operation for the Zero RPM Manager.
- **Dust Buildup:** Clean the fan and vents as described in the Maintenance section.
- **Obstruction:** Ensure no cables or foreign objects are interfering with the fan blades.

If these steps do not resolve your issue, please contact Antec customer support.

8. SPECIFICATIONS

Detailed technical specifications for the Antec GSK850 V2 PSU.

Feature	Description
Model Name	GSK850 V2 US

Feature	Description
Brand	Antec
Output Wattage	850W
Certification	80 PLUS Gold Certified
ATX Standard	ATX3.1 Compatible
PCIe Standard	PCIe 5.1 Support (with 12V-2x6 GPU cable)
Design	Full Modular, PhaseWave Design (LLC + DC-DC)
Fan Type	120mm Silent Fan with Zero RPM Manager
Cooling Method	Air
Protection Suite	CircuitShield (OCP, OVP, UVP, SCP, OPP, OTP, SIP, NLO)
Cable Type	High-Quality Braided Cable
Product Dimensions (L x W x H)	5.51 x 3.38 x 5.9 inches (140 x 86 x 150 mm)
Item Weight	5.51 Pounds (2.5 kg)
Compatible Devices	Personal Computer
Connector Types	ATX, EPS, Molex, PCI Express, SATA
UPC	761345201490

9. WARRANTY AND SUPPORT

Antec stands behind the quality of its products.

9.1. Warranty Information

The Antec GSK850 V2 PSU comes with a **10-Year Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims. For full warranty terms and conditions, please visit the official Antec website.

9.2. Customer Support

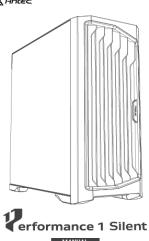
If you require technical assistance, have questions about your product, or need to initiate a warranty claim, please contact Antec customer support through their official channels.

You can find more information and support resources by visiting the Antec Store: [Antec Official Store](#)



[Antec NeoECO Gold Modular NE750G M Power Supply Unit - Technical Specifications](#)

Detailed technical specifications for the Antec NeoECO Gold Modular NE750G M power supply unit, including wattage, efficiency rating, voltage, current, connectors, and dimensions.



[Antec Performance 1 FT Silent Full Tower PC Case - Installation and Features Manual](#)

A comprehensive guide to the Antec Performance 1 FT Silent full tower PC case, covering accessory contents, product specifications, and detailed installation instructions for building your PC.



[Antec Fusion Fan Manual - Installation and Connection Guide](#)

This manual provides instructions for installing and connecting Antec Fusion ARGB fans. It covers fan installation within a PC case and various connection options to the motherboard or controller, including PWM and ARGB headers.



[Antec HCG-900 Power Supply User Manual](#)

User manual for the Antec HCG-900 High Current Gamer power supply, detailing its features, specifications, system protection, and installation.