

ARESGAME AGV500

ARESGAME AGV500 500W 80 Plus Bronze Certified Power Supply User Manual

Model: AGV500 | Brand: ARESGAME

1. PRODUCT INTRODUCTION

The ARESGAME AGV500 is a 500W power supply unit (PSU) designed for desktop ATX systems, featuring 80 Plus Bronze certification for energy efficiency. It provides stable power output and incorporates design elements for effective heat dissipation and quiet operation.

Key Features

- **500W Output:** Provides reliable power for various PC configurations.
- **80 Plus Bronze Certified:** Achieves 85% efficiency or higher under typical loads, reducing energy consumption and heat.
- **Ultra Quiet 120mm Fan:** Features intelligent fan speed control for optimal cooling with minimal noise.
- **Excellent Heat Dissipation:** Honeycomb ventilation design enhances airflow and cooling performance.
- **Comprehensive Protection:** Includes Over Voltage Protection (OVP), Under Voltage Protection (UVP), Over Power Protection (OPP), and Short Circuit Protection (SCP) for system safety.
- **Non-Modular Design:** All cables are permanently attached.

Package Contents

- 1 x ARESGAME AGV500 500W Power Supply
- 1 x AC Power Cord
- 1 x User Manual (this document)
- 1 x Quick Installation Guide
- 1 x PSU Tester
- 4 x Mounting Screws

- 4 x Cable Ties



Figure 1: The ARESGAME AGV500 500W Power Supply, showcasing its black casing and attached cables.

2. IMPORTANT SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating this power supply. Failure to comply with these instructions may result in electric shock, fire, or damage to the product and connected components.

- **Electrical Hazard:** Do not open the power supply unit. High voltages are present inside, even when the unit is unplugged. There are no user-serviceable parts.
- **Ventilation:** Ensure adequate ventilation around the power supply. Do not block any ventilation openings.
- **Environment:** Install the power supply in a dry, well-ventilated area, away from direct sunlight, heat sources, and moisture.
- **Power Cord:** Use only the provided AC power cord. Ensure the power cord is fully inserted into both the power supply and the wall outlet.
- **Grounding:** The power supply must be properly grounded.
- **Overload:** Do not overload the power supply. Ensure the total power consumption of your components does not exceed the PSU's rated wattage.

- **Children:** Keep the power supply and its components out of reach of children.

3. SETUP AND INSTALLATION

Before You Begin

- Turn off and unplug your computer from the wall outlet.
- Open your computer case.
- If replacing an existing power supply, disconnect all cables from the old PSU and remove it from the case.
- It is recommended to wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to components.

Physical Installation

1. Carefully place the ARESGAME AGV500 power supply into the designated PSU bay in your computer case.
2. Align the screw holes on the power supply with those on the case.
3. Secure the power supply using the four provided mounting screws.

Cable Connections

Connect the necessary cables from the power supply to your motherboard and other components. Refer to your motherboard and component manuals for specific connection points.

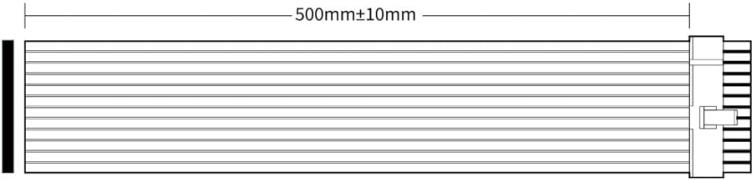

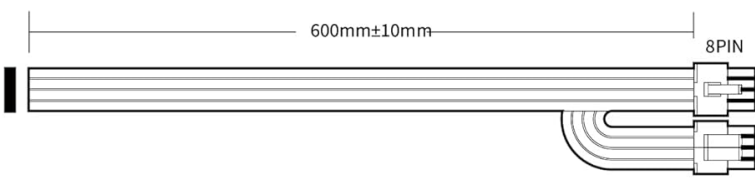
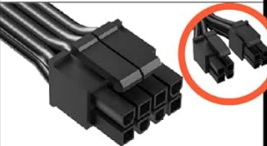
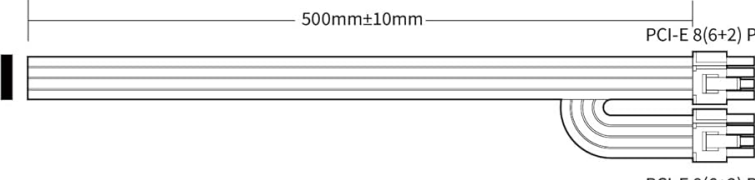

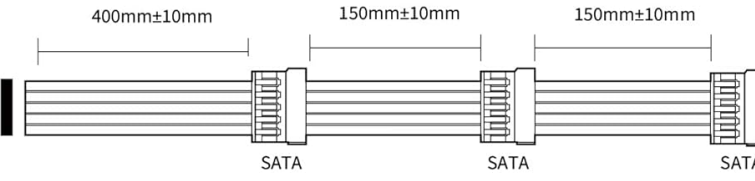

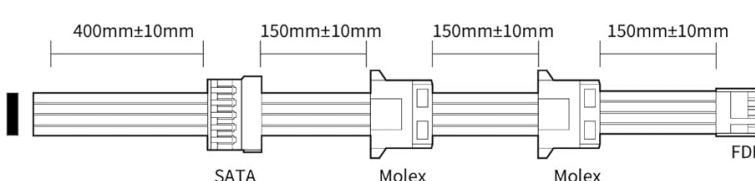
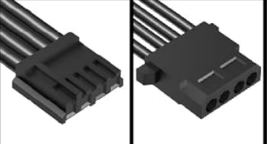
Description	Cable Qty	Connector Qty
 <p>500mm±10mm</p> <p>20+4 PIN</p>	1	 <p>Mainboard Power Connector 20+4 PIN x1</p>
 <p>600mm±10mm</p> <p>8PIN</p> <p>8(4+4) PIN</p>	1	 <p>CPU Power Connector 8PIN+8(4+4)PIN x1</p>
 <p>500mm±10mm</p> <p>PCI-E 8(6+2) PIN</p> <p>PCI-E 8(6+2) PIN</p>	1	 <p>PCI-E Connector 6+2 PIN x4</p>
 <p>400mm±10mm</p> <p>150mm±10mm</p> <p>150mm±10mm</p> <p>SATA</p> <p>SATA</p> <p>SATA</p>	1	 <p>SATA Connector x6</p>
 <p>400mm±10mm</p> <p>150mm±10mm</p> <p>150mm±10mm</p> <p>150mm±10mm</p> <p>SATA</p> <p>Molex</p> <p>Molex</p> <p>FDD</p>	1	 <p>x1 FDD Connector 4 PIN</p> <p>x3 Molex Peripheral Connector 4-pin</p>

Figure 2: Overview of the ARESGAME AGV500's non-modular cable types and quantities, including Mainboard, CPU, PCI-E, SATA, and Molex connectors.

- **20+4 Pin Mainboard Power Connector:** Connect to the main power socket on your motherboard.
- **8 (4+4) Pin CPU Power Connector:** Connect to the CPU power socket on your motherboard.
- **PCI-E 6+2 Pin Connector:** Connect to graphics cards requiring PCI-E power. The AGV500 provides four such connectors.
- **SATA Power Connector:** Connect to SATA devices such as hard drives, solid-state drives, and optical drives. The AGV500 provides six SATA connectors.
- **Molex Peripheral Connector:** Connect to older peripherals or case fans. The AGV500 provides three Molex connectors.
- **FDD Connector:** Connect to floppy disk drives if needed (one provided).



Figure 3: Rear panel of the ARESGAME AGV500, showing the AC power input socket and the main power switch.

After connecting all internal components, connect the provided AC power cord to the power supply's input socket and then to a wall outlet.

4. OPERATING INSTRUCTIONS

Powering On/Off

1. Ensure all internal connections are secure and the AC power cord is connected to both the PSU and the wall outlet.
2. Flip the main power switch on the rear of the power supply to the 'I' (ON) position.
3. Press the power button on your computer case to start the system.
4. To power off, shut down your operating system normally. For complete power disconnection, flip the main power switch on the PSU to the 'O' (OFF) position and unplug the AC power cord.

5. MAINTENANCE AND CARE

Proper maintenance ensures the longevity and optimal performance of your power supply.

- **Cleaning:** Periodically clean the exterior of the power supply and its fan grille to prevent dust buildup. Use compressed air to gently clear dust from the fan and ventilation areas. Ensure the power supply is turned off and unplugged before cleaning.
- **Ventilation:** Ensure that the computer case has adequate airflow and that the power supply's ventilation openings are not obstructed.
- **Cable Management:** Organize cables inside your computer case to improve airflow and prevent interference with cooling.



EXCELLENT HEAT DISPERSING

Honeycomb Ventilation Design High Airflow Fan



Figure 4: The honeycomb ventilation design on the ARESGAME AGV500, crucial for efficient heat dissipation.

6. TROUBLESHOOTING

If you encounter issues with your ARESGAME AGV500 power supply, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Computer does not power on.	Power cord not connected, PSU switch off, faulty components, insufficient power.	Ensure AC power cord is fully plugged in. Verify PSU switch is in 'I' (ON) position. Check all internal power connections. Use the included PSU tester to verify PSU functionality.
System powers on but shuts down unexpectedly.	Overload, overheating, faulty components.	Ensure total component wattage does not exceed 500W. Check for proper ventilation and clean any dust. Verify all connections are secure.
Loud fan noise from PSU.	Dust buildup, fan obstruction, faulty fan.	Clean the PSU fan and grille with compressed air. Ensure no cables are obstructing the fan. If noise persists, contact customer support.
Burning smell or smoke.	Serious component failure.	Immediately turn off the computer and unplug the AC power cord. Do not attempt to restart. Contact customer support immediately.

7. TECHNICAL SPECIFICATIONS

Specification	Detail
Model	ARESGAME AGV500
Wattage	500W
80 Plus Certification	Bronze Certified
Form Factor	ATX
Modular Type	Non-Modular
VAC Input	100V-240V, 10-5A, 50-60Hz
Fan Size	120mm
Cooling Method	Air
Product Dimensions (LxWxH)	150mm x 140mm x 86mm (5.9 x 5.5 x 3.3 inches)
Item Weight	4.33 pounds
Protection Features	OVP, UVP, OPP, SCP

DC Output Table

DC Output	+5V	+3.3V	+12V	-12V	+5Vsb
Max Output, A	18A	18A	37.5A	0.3A	2.5A
Combined, W	95W		450W	3.6W	12.5W
Output Power, P cont	500W @ 40°C				

Efficiency Information

80PLUS®BRONZE CERTIFIED

WITH 85% EFFICIENCY OR HIGHER
UNDER TYPICAL LOADS!

AC Input	100-240 VAC, 10-5A, 50-60Hz				
DC Output	+5V	+3.3V	+12V	-12V	+5Vsb
Max Output, A	18A	18A	37.5A	0.3A	2.5A
Combined, W	95W		450W	3.6W	12.5W
Output Power, P cont	500W @ 40°C				

80 PLUS EFFICIENCY

AGV500

— Input 230Vac
— Input 115Vac
— 80PLUS BRONZE RATED

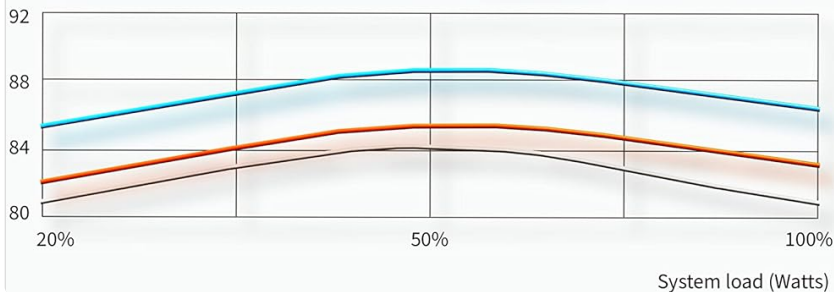


Figure 5: 80 Plus Bronze efficiency curve for the AGV500, illustrating efficiency levels at various system loads for both 115Vac and 230Vac input.

8. WARRANTY AND CUSTOMER SUPPORT

ARESGAME products are manufactured to high quality standards. This product is covered by a manufacturer's warranty against defects in materials and workmanship. Please refer to the warranty card included in your package or visit the official ARESGAME website for detailed warranty terms and conditions.

For technical assistance, troubleshooting, or warranty claims, please contact ARESGAME customer support through their official website or the contact information provided with your purchase. When contacting support, please have your product model (AGV500) and proof of purchase readily available.