

USER MANUAL: ITX-PFC500W

ITX-PFC500W Fully Modular ITX Power Supply

1. PRODUCT OVERVIEW

Thank you for choosing the **Apevia ITX-PFC500W** power supply. This unit is a high-performance, fully modular, full-range active PFC (100-240V) power supply.

It is designed as a standard-size Mini-ITX / Flex-ATX unit, ideal for compact and versatile computing applications.

2. SYSTEM REQUIREMENTS & COMPATIBILITY

- **Form Factor:** Compatible with PC systems requiring ITX / Flex-ATX power supplies.
 - **Motherboards:** Supports standard 24-pin ATX and modern CPU power requirements.
 - **Input Voltage:** Full Range Active PFC 100-240V (automatic adjustment).
 - **Hardware Clearance:**
 - **Dimensions:** **165.6mm x 81.8mm x 41.2mm** (L x W x H).
 - **Modular Design:** Use only the modular cables provided with this unit to avoid hardware damage.
-

3. INSTALLATION STEPS

- **Safety First:** Shut down your PC and disconnect it from the power outlet before starting.
 - **Mounting:** Securely mount the ITX-PFC500W into your case using the appropriate screws.
 - **Modular Cable Connection:**
 - Connect the required modular cables to the PSU first.
 - Plug the **20+4 pin** main connector into the motherboard.
 - Plug the **8-pin (4+4)** CPU connector into the motherboard.
 - Plug the **6+2 pin** PCI-E connector into the graphics card if required.
 - **Final Check:** Ensure all cables are firmly seated before reconnecting the AC power.
-

4. TECHNICAL SPECIFICATIONS

AC INPUT	100-240VAC, 50-60Hz (Full Range Active PFC)
DC OUTPUT	+3.3V
MAX CURRENT	12A
TOTAL POWER	500W

5. TROUBLESHOOTING

- **System fails to power on:**
 - Verify the AC power cord is fully inserted into the wall and the PSU.
 - **Crucial:** The PSU will not start simply by plugging it in; it must be correctly connected to the motherboard.
 - Check that all modular cables are securely "clicked" into their ports.
 - **Unstable Operation:**
 - Ensure system power draw does not exceed the **500W** rating.
 - Confirm the **40mm cooling fan** is not obstructed and has adequate airflow.
-

6. SAFETY & MAINTENANCE

- **Do Not Open:** There are no user-serviceable parts inside. Opening the unit voids the warranty.
 - **Environment:** Keep the PSU away from liquids, high humidity, and extreme temperatures.
 - **Protection:** This unit includes OVP, OLP, OCP, OTP, and SCP for your system's safety.
-

7. CONNECTOR PINOUT SPECIFICATIONS

A. 20+4 Pin Main Power Connector

Used to power the motherboard. The 4-pin section can be detached to support older 20-pin motherboards.

- Standard: ATX12V v2.4
- Configuration: 20-pin fixed + 4-pin detachable.
- Function: Provides +3.3V, +5V, +12V, and standby power to the system.

B. 8-pin (4+4) CPU +12V Power Connector

Provides dedicated power to the processor.

- Configuration: Can be used as a solid 8-pin or separated into two 4-pin (P4) connectors.
- Installation: Push one 4-pin section down and the other up to separate for motherboards requiring only a 4-pin CPU input.

C. 8-pin (6+2) PCI-Express Connector

Dedicated power for high-performance Graphics Processing Units (GPUs).

- Configuration: 6-pin main connector with a detachable 2-pin section.
- Compatibility: Supports both 6-pin and 8-pin PCI-E power sockets.

D. SATA Power Connectors

Used for modern storage and optical drives.

- Support: SSDs, HDDs, and SATA Optical Drives.
- Voltage: Provides +3.3V, +5V, and +12V DC output.

E. 4-Pin Peripheral (Molex) Connectors

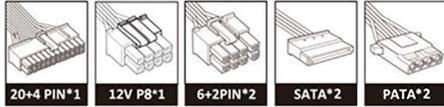
Used for legacy hardware and cooling accessories.

- Application: Case fans, older IDE hard drives, and liquid cooling pumps.
- Design: Standard 4-pin "Male" and "Female" pass through compatibility.

8. SUPPORT & CONTACT

For technical assistance, please visit our website or contact us via email:

- Web: www.apevia.com
- Email: support@apevia.com

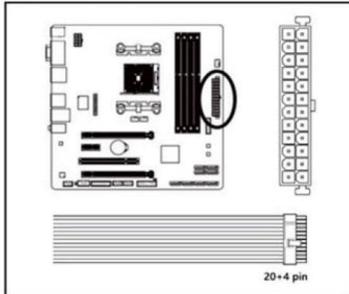


20+4 PIN Exposed (385mm)* 1
 12V P8 Exposed (385mm)* 1
 PCIe 6+2PIN Exposed (385mm)* 1+PCIe 6+2PIN(185mm)
 PATA Exposed (385mm)+PATA(185mm)+SATA(185mm)
 +SATA(185mm)
 Total : (20+4P*1, P8(4+4PIN)*1+PCIe6+2P*2, SATA*2, PATA*2)

AC Input	100-240VAC, 10A/4A, 50-60HZ				
DC Output Voltage	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	12A	14A	33A	0.3A	2.5A
Combined Power	100W		396W	3.6W	12.5W
Total Power	500W				

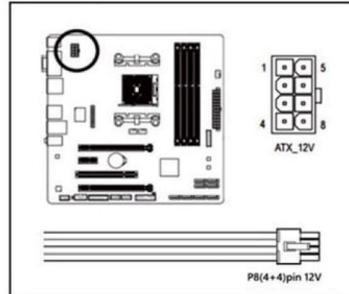
Installation:

STEP 1



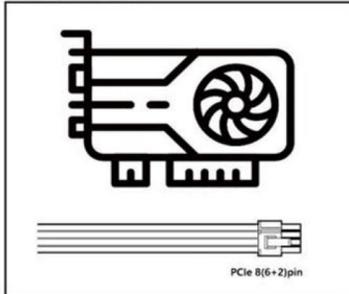
Plug the 20pin/24pin connector to the motherboard.

STEP 2



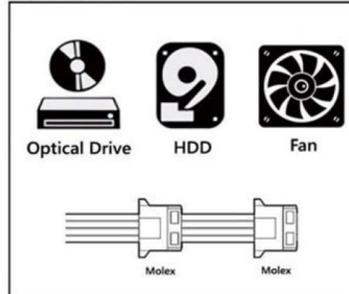
Plug in the 8pin/4+4pin connector to the motherboard.

STEP 3



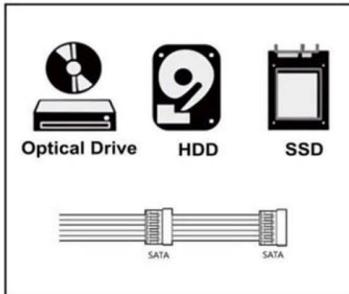
Plug in the PCIe 8pin/6+2pin connector to the graphics card .

STEP 4



Plug in the necessary MOLEX to any optical drives / hard drives / fans you have installed on your computer.

STEP 5



Plug in the necessary SATA to the optical drives / hard drives you have installed on your computer.