

COMPUTER POWER SUPPLY USER MANUAL

MODELS: 178501,
178518, 178525,
178532, 178549



Shown: Model 178501


MANHATTAN™

MAN-CPSGP2-UM-0608-02

Thank you for your purchase of this MANHATTAN® Computer Power Supply. With the simple steps below for installation, you'll soon be able to enjoy the benefits of the following features.

- A steady, safe and reliable power source
- Convenient switch selects 115 V or 230 V power input
- Internal fan delivers quiet and efficient cooling
- Short circuit protection prevents power sag and spike damage
- Multiple built-in connectors allow quick, easy peripheral installation without adapters (including PCI-E on select models)
- Power factor correction (PFC) reduces environmental interference with nearby electrical devices
- Lifetime Warranty

Safety Precautions

For safety, unplug your PC from the AC outlet before you remove your old power supply. While power supplies are built with safety in mind, they can deliver a potentially life-threatening shock. The best way to avoid this is to first unplug the three-prong electrical connector from the wall and then unplug the electrical connector from the power supply.

Replacement

1. Detach all external components; then remove the old power supply.
2. Open the case to begin removing the old power supply. (You may want to consult your computer owner's manual for details.)
3. Remove all attached power connections to the motherboard.
4. Once the cables from the power supply to the motherboard are disconnected, disconnect the cables that attach peripheral devices (CD drives, hard drives, etc.). **NOTE:** Cables connecting the motherboard to other peripherals in your computer, such as the ribbon cables, do not need to be removed.
5. Remove the power supply from the PC case (removing the screws on the back). Once the old unit is out, simply reverse this process to install by slipping the new unit in its place, attaching it and reattaching the connectors. **NOTE:** The power supply will come out of your computer encased in a steel or aluminum box. Do not take apart the power supply itself. The possibility of a shock from an unplugged power supply is remote, but it does exist, especially if you remove the protective cover.

New Installation

For a new installation, simply reverse the Replacement steps and:

1. Keep the power supply unplugged until it is ready to be tested.
2. Always refer to your motherboard documentation for plug details.

Specifications

Standards & Certifications

- UL; FCC; ATX 12 V 2.0

External Ports

- Input power w/ power switch

Internal Connections

- 4 Molex 4-pin (5 for Model 178549)
- ATX 20+4 pin
- 12 V 4-pin auxiliary power
- FDD (floppy disk drive) 4-pin
- 2 SATA power 15-pin
- PCI-E 6-pin (Models 178525, 178532 & 178549 only)
- Voltage (min./max. load):
 - Model 178501: +5 V (0.5 A / 18 A), +12 V1 (1 A / 10 A), +12 V2 (1 A / 10 A), -12 V (0 A / 0.3 A), +3.3 V (0.3 A / 19 A), +5 VSB (0 A / 2.5 A)
 - Models 178518: +5 V (0.5 A / 18 A), +12 V1 (0.5 A / 12 A), +12 V2 (0.5 A / 12 A), -12 V (0 A / 0.3 A), +3.3 V (0.3 A / 21 A), +5 VSB (0 A / 2.5 A)
 - Model 178525: +5 V (0.5 A / 18 A), +12 V1 (1 A / 15 A), +12 V2 (1 A / 15 A), -12 V (0 A / 0.3 A), +3.3 V (0.3 A / 21 A), +5 VSB (0 A / 2.5 A)
 - Model 178532: +5 V (0.5 A / 20 A), +12 V1 (1 A / 17 A), +12 V2 (1 A / 17 A), -12 V (0 A / 0.3 A), +3.3 V (0.3 A / 24 A), +5 VSB (0 A / 2.5 A)
 - Model 178549: +5 V (0.5 A / 28 A), +12 V1 (1 A / 16 A), +12 V2 (1 A / 17 A),

-12 V (0 A / 0.3 A), +3.3 V (0.3 A / 30 A), +5 VSB (0 A / 3 A)

Power Input

- Voltage: 104–127 V AC (nom. 115 V); 207–253 V AC (nom. 230 V)
- Wattage:
 - Model 178501: 255 W
 - Model 178518: 305 W
 - Model 178525: 355 W
 - Model 178532: 405 W
 - Model 178549: 500 W
- Frequency: 47–63 Hz
- Current (max):
 - Models 178501, 178518, 178525, 178532: 115 V 4 A / 230 V 2 A
 - Model 178549: 115 V 10 A / 230 V 5 A
- Max. inrush current: 100 A cold start

Power Regulation

- Line regulation: +/- 1%
- Load regulation: +/- 5% (-12 V +/- 10%)
- Ripple and noise:
 - Models 178501, 178518, 178525, 178532: +3.3 V / 50 mV, +5 V / 50 mV, +12 V1 / 120 mV, +12 V2 / 120 mV, -12 V / 120 mV, +5 VSB / 50 mV
 - Model 178549: +3.3 V / 50 mV, +5 V / 50 mV, +12 V1 / 100 mV, +12 V2 / 100 mV, -12 V / 100 mV, +5 VSB / 50 mV

- Efficiency: 70% (min.) at full load

Physical

- 120 mm internal fan (80 mm on Models 178501 & 178518)
- Dimensions: 150 x 140 x 86 mm (6 x 5.5 x 3.5 in.)
- Weight:
 - Models 178501, 178518, 178532, 178549: 1.54 kg (54.4 oz.)
 - Model 178525: 1 kg (35.0 oz.)

Environmental

- Operating temp.: 0–40°C (0–105°F)
- Storage temp.: -20–70°C (-20–158°F)
- Storage humidity: 5–95% non-condensing

Package Contents

- Computer Power Supply
- User manual



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