

## **PW-200-M, PW-200-V Series 12V, 200 Watts ATX Power Supply**

### **Quick Installation Guide**

Version 1.2  
P/N 6657400

## Introduction

The PW-200-M / PW-200-V is a small yet powerful and fully compliant ATX power supply designed to power a wide variety of standard PCs from a single 12V power source.

The PW-200-M / PW-200-V are the only cable-less mini-ITX power supply solution. Compatible with an entire range of mini-ITX motherboards as well as regular boards the PW-200 provides cool, silent power for system. The PW-200-M / PW-200-V have many advantages over a regular power supply:

- 100% silent operation
- Low heat dissipation with efficiency over 95%
- Low RFI/RMI and low ripple noise
- Plugs directly into the motherboard's power connector, no cable mess
- Long life (MTBF rated at > 200,000 hours)

## Quick installation

The PW-200-M / PW-200-V have been specifically designed for the Mini-ITX form factor, thus eliminating the need for ATX power cables.

In case you are using a non-mini-ITX board or a mini-ITX board that doesn't conform to the form factor that the PW-200-M / PW-200-V was designed for, please use a regular female-male ATX power supply extension cable.

- 1) After the power board was 'snapped in', hook the hard drive power or floppy power to your floppy/hard drives. If more hard drives or floppy connectors are needed, use a HDD/floppy "Y" splitter cable.
- 2) Connect a 12 VDC power adapter (or any 12V source) to the DC-to-DC connector, center pin / white wire is positive (+).
- 3) Turn on the PC using the motherboard ON/OFF switch

## Typical configuration

The PW-200-M / PW-200-V have been tested with all mini-ITX board under virtually any disk/floppy/CDROM/PCI configuration. Additionally, the PW-200-M / PW-200-V can power P4 boards. Some P4 boards require P412V connector. Please check <http://www.mini-box.com> for models that have P412V cable harness or solder a P4 cable harness into the 4 PCB holes located near the HDD/Floppy power connector.

## Removing the PW-200-M

In order to remove the PW-200 you must release the power connector latch and then pull up the unit. In case the latch is not accessible, insert a thin long rod into the hole and push the rod, against the latch.

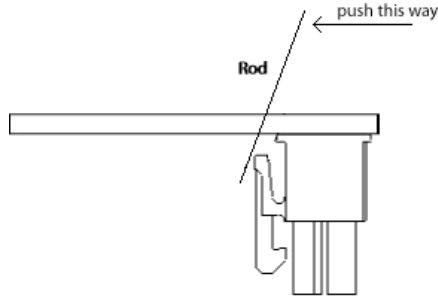


Fig 1.0, releasing the connector latch

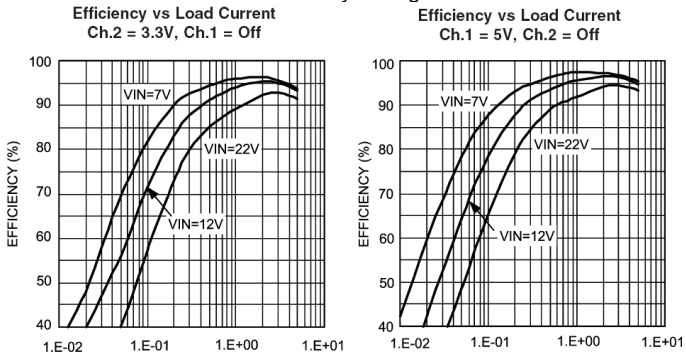
**Specifications, PW-200-M, PW-200-V**

Power Ratings (Max Power = 205 Watts, peak 250watts)

Volts (V)	Max Load (A)	Peak Load (A)	Regulation %
5V	6A	10A	+/- 1.5%
5VSB	2A	10A	+/- 1.5%
3.3V	6A	10A	+/- 1.5%
-12V	0.1A	0.2A	+/- 5%
12V	12A	13.5A	Switched input

12V input tolerance = 11V – 14V, 11-16V can be achieved with a simple trace cut. Consult the website for more information. Warranty is void after this alteration.

**Efficiency Ratings**



**Size**

**PW-200-M:** 61mm(L) \* 57mm(W) \* 30mm (H) (1U compliant)

**PW-200-V:** 155mm(L) \*23mm(W) \* 30mm (H) (1U compliant)

#### **DC-Jack**

Female, 2.5\*5.5\*10 mm

#### **Connectors**

Molex 39-01-2200, two 3.5" drive power connector, 1 floppy. Optional 5V header (2x0.1" pitch) available on the power board. P4-12V 4 pin header sold separately.

#### **Overload protection**

Over load protection will be effected when either of the loads (+5V & +3.3V) exceeds > 200% Max Load.

#### **Turn-on Delay**

After turning on, at least 20 ms will be needed for the rise of +5V output voltage (measured from 10% to 95%) to reach its peak.

#### **Remote ON/OFF control**

Logic level is LOW - Output voltage is enabled.

Logic level is HIGH - Output voltage is disabled.

#### **Operating environment**

Temperature: -20 to 85 degree centigrade.

Relative Humidity: 10 to 90 percent, non-condensing.

Altitude: 60,000 ft.

#### **Efficiency**

Greater than 95% at full load.

#### **Shipping and storage, MTBF**

Temperature -40 to +90 degree centigrade

Relative Humidity 5 to 95 percent, non-condensing

#### **Warranty**

1 Year Limited Warranty statement. Warranty is void if maintenance or calibration is performed by end-user or by use in conjunction with power modules not provided by mini-box.com.

#### **Support**

Email: [support@mini-box.com](mailto:support@mini-box.com)

Web Site: <http://www.mini-box.com>