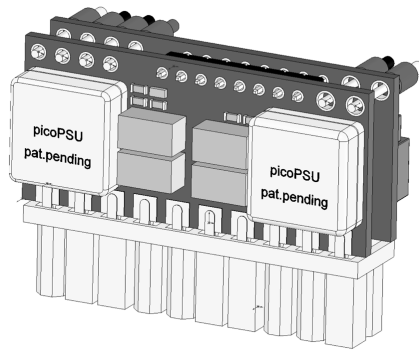




Quick Installation Guide

3107810



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Introduction

The Pico PSU 3107810 is a small yet powerful and fully compliant ATX power supply designed to power a wide variety of motherboard from a single 12-32V unregulated power source.

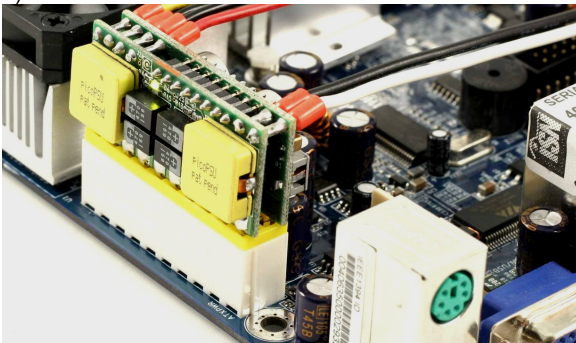
The Pico PSU 3107810 is the only “plug-in” wide input range power supply solution for general purpose low power motherboards. **Compatible with most VIA C3/C7 CPUs M/B and with Pentium-M / Core Duo boards**, Pico PSU 3107810 provides cool, 100% silent power for your system. The Pico PSU 3107810 has many advantages over a regular power supply:

- Smallest ATX PSU to date
- 100% silent operation
- Low heat dissipation with combined efficiency over 93%
- Plugs directly into the motherboard's power connector, no cable mess

Quick installation Instructions

The 3107810 has been specifically designed for the Mini-ITX form factor, thus eliminating the need for ATX power cables. It is also 1U compliant – height will not exceed the 1U formfactor.

- 1) After the Pico PSU module 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)



- 2) Connect a 12-32VDC power adapter (peak should not exceed 34V) to the input connector.
- 3) Turn on the PC using the motherboard ON/OFF switch

Typical configuration

The Pico PSU 3107810 has been tested with all mini-ITX board under virtually any disk/floppy/CDROM/PCI configuration.

Removing the Pico PSU 3107810

In order to remove the Pico PSU you must release the power connector latch and then remove the unit. Gently lift the Pico PSU out from the ATX connector, by grabbing from the Pico PSU PCB, not from components or the wire harness.

Specifications, Pico PSU, 120Watts DC-DC ATX PSU

Power Ratings (Max Load = 120 Watts)

Volts (V)	Max Load (A)	Peak Load (A)	Regulation %
5V	6A	8A	+/- 1.5%
5VSB	1.5A	2A	+/- 1.5%
3.3V	6A	8A	+/- 1.5%
-12V	0.1A	0.1A	+/- 5%
12V	6A	8A	+/- 3%
At max load, forced air ventilation is required. For fanless operation and/or high V(In) de-rate the combined output of the 3.3, 5V and 12V rails by ~20-40%. Peak load should not exceed 60 seconds.			

Efficiency Ratings, 3.3 and 5V rail @ 16V input

CH1=5V	Efficiency (%)	CH2=3.3V	Efficiency (%)
1A	86%	1A	85%
3A	94%	3A	93%
5A	95%	5A	94%
8A	92%	8A	91%

Input Requirements: 12-32V un-regulated, min=2A, max=10A (load dependent).

Max Input Voltage supported by TVS clamp=34V. NOTE: Above 34V, the TVS protection diode will clamp and burn the input fuse.

Size: 44.5mm(L) * 25mm(W) * 30mm (H) (1U compliant)

Weight: 70gramms, including cable harness, 35 grams without cable harness.

DC-Jack: Female, panel mount, 2.5*5.5*10 mm.

Connectors

Molex 39-01-2200, two 3.5" drive power connector, 1 floppy.

Overload protection

Over load protection will be effected when either of the loads (+5V & +3.3V) exceeds 140% Max Load.

Turn-on Delay

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

Remote ON/OFF control

Logic level is LOW - Output voltage is enabled (PS_ON pin)
Logic level is HIGH - Output voltage is disabled (PS_ON pin)

Operating environment: Temperature: -40 to 65 degree centigrade.
NOTE: Unit temperature can reach up to 85C on the surface.

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

Efficiency, MTBF: 95%. MTBF=100K hours at 55Celsius.

Shipping and storage: Temperature -40 to +90 degree centigrade.
Relative humidity 5 to 95 percent, non-condensing

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