

# **TFX** USER MANUAL



## AP-TFX40 AP-TFX35





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## User's Manual TFX 350W, 400W

### TFX FOR SLIM CHASSIS

The TFX is a compact and flexible Power Supply. Designed for slim and small form factor chassis, or as a replacement PSU for IBM SurePOS, Shuttle XPC, and HP Pavillion systems; its flexibility can be used to build small media servers, supply power for all types of kiosks and can even be used for small business servers.

#### FULL RANGE INPUT

The TFX PSU features Full Range Input, this feature automatically detects the power source being sent to the PSU and adjusts it accordingly from the 120~240V range. Coupled with the Active Power Factor Correction feature or (Active PFC), this feature improves the power factor value of the power supply by adjusting the voltage input supplied, allowing a steady transition of power to flow through the system.

#### CONTINUOUS POWER

Most power supplies are rated by their peak performance in wattage but Athena Power's power supplies runs continuously at its rated performance at normal levels of usage and can reach higher peaks of power.

#### AUTO FAN SPEED CONTROLER

With its thermal fan speed control it will detect the amount of heat generated by the power supply and spin accordingly. Using this controller to detect the heat levels of the PSU it will adjust the fan speed accordingly; this feature helps reduce the cost of energy and also helps dissipates heat throughout the whole system. Promoting efficiency and noise reduction, the Auto Fan Speed Controller is the solution for smaller housing fans and helps systems run quietly.

#### NVIDIA™ SLI™ READY

Athena Power's TFX 350-400W power supplies are NVIDIA<sup>™</sup> SLI<sup>™</sup>-Ready for use with multiple high-end graphic cards for superior parallel graphics processing. With higher power and the addition of 2 PCIE 6+2 Pin connectors, the 350-400W TFX is ideal for those with slim systems who wish to add additional GPUs to their system. This feature is available exclusively to TFX 350-400W power supplies and all TFXs rated with a lower wattage do not support this function.



#### 80 PLUS™ BRONZE CERTIFICATION

The 80 PLUS<sup>™</sup> certification is an international certification awarded to Power Supplies for their high efficiency. With an 80 PLUS certified power supply, users will have a product that uses less energy, generates less heat, and is more durable than other non-certified PSUs. By running loads at a more efficient rate, there is less wasted energy which helps the environment.

#### PROTECTION

Protection to your system's hardware is very important and Athena Power has provided industrial-grade safety circuitry that will help protect your system. With OVP (Over Voltage Protection), SCP (Short Circuit Protection), and OCP (Over Current Protection) this will help protect user systems by preventing burning of your system. By automatically shutting the system down or stopping an oversurge of power due to blackouts these protection features helps reduce the damage to systems.

#### SAFETY CERTIFICATIONS

Power supply safety certification is highly important and required by law in many countries; Athena Power's TFX series has the UL, RoHS, FCC, TUV, and CB certifications. For more information about these certifications please visit their respective websites.



#### POWER OUTPUT

Model Number	Output Voltage	+3.3V	+5V	+12V1	+12V2	-12V	+5VSB
AP-TFX40	Load MAX	15A	15A	16A	16A	0.5A	2.5A
AP-TFX35	Load MAX	15A	15A	11A	11A	0.5A	2.5A



#### CONNECTORS

		AP-TFX40 AP-TFX35
	ATX 24 (20+4) pin	x1
	EPS-12V 8 pin	x1
	EPS-12V 8 (4+4) pin (P4-12V x 2)	x1
	P4-12V 4 pin	x1
	PCIE 6 pin	
	PCIE 6 (6+2) pin	x2
Tana an an	SATA Power 15 pin	x3
6000	Molex Power 4 pin	x2
	Floppy Power 4 pin	x1

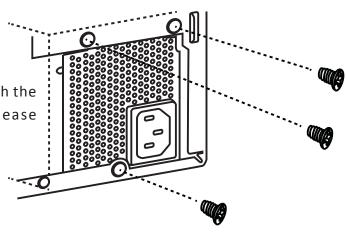
DIMENSION

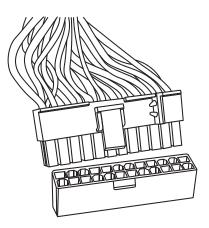
3.4" x 2.5" x 7" (W x H x D)



#### INSTALLATION INSTRUCTIONS

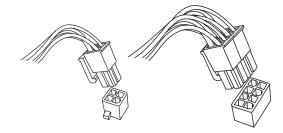
**01.** Install the TFX PSU into your case with the three screws, if a bracket is needed please contact us at service@athenapower.us





**02.** Connect the 24-pin ATX Connector to your motherboard. If your motherboard uses a 20-pin connector, detach the 4-pin attachment on the 24-pin connector.

Note: The detachable 4-pin section cannot be used in place of a 4-pin +12V connector.



**03.** Connect the 8-pin or 4-pin connector for the CPUs.

Note: Please also refer to your motherboard user guide for any special instructions.

**04.** As necessary, connect all other connectors into the viable area on the motherboard. Molex, SATA, and etc. Please make sure all pins line up accordingly and do not forcefully plug in any connectors.

**05.** Connect the AC power cord to the power supply AC inlet and turn on your computer.



#### FAQs

#### Why is my 24 ATX pin connector too big for my motherboard?

Some Dell and HP motherboards were designed specifically with a mini ATX 24 connection and the FlexATX although a replacement and upgrade for slim and mini-ITX systems was designed with the standard 24 pin ATX connector. Athena Computer Power addresses this problem by offering a convertor cable available online or at your local retail stores. Please visit http://athenapower.com/product/converteradapter-cable/replacement-cable/cable-atx20m24h for more information.

## My motherboard only needs a 20 pin ATX connector the FlexATX only has a 24 pin connector, what should I do?

Athena Power has taken this issue into consideration and has provided a 20+4 pin connector. What that means is that the connector head itself can be used for a 24 pin ATX motherboard or a 20 pin ATX motherboard.

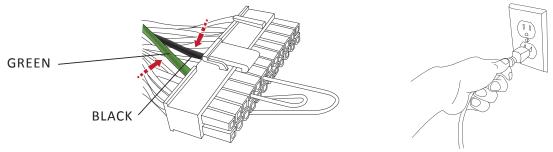
#### I have two 4 pin connectors what are they used for?

These are designated as EPS connectors and can serve as a connector for a P4 12V connection or attached together and used as an EPS8 Pin connector depending on your needs.

#### Why did my fan stop spinning?

The TFX is built with a thermal fan speed controller which means that depending on the heat of your system, the fan will spin accordingly. If your system remains at a low temperature the fan may stop spinning altogether, if you notice that your system is indeed hot to the touch and the fan is not spinning, please remove the power supply from your system and conduct a simple test.

To conduct a simple test, please use a metal paperclip to short the green wire and any black wire on the 24 pin ATX connector. (see diagram below) This will send a signal to your PSU to start operating after you connect the power cord into the wall jack. Once you have conducted this procedure please check PSU to observe if the fan is spinning or not; if it is not spinning, please contact our service department immedeately at (626) 810-5008.





#### **INFORMATION & REFFERENCE**

For more information regarding the TFX power supply, please refer to the following websites by typing in the URL below in your web browser or scan the QR Code with your smart mobile device. To Scan the QR Code, a QR Code reader is required, please download and install the application by searching "QR Code" through the Android Market or App Store, after the application is fully installed, scan the QR Code with your QR Code reader application.

#### ATHENA POWER GPS (Green Power Standard)



http://www.athenapower.us/products/ power\_supply/true-green-power.html

ECOVA 80 PLUS<sup>™</sup> - ACPC



http://www.plugloadsolutions.com/80Pl usPowerSuppliesDetail.aspx?id=138&typ e=2

**TFX Cross-Reference** 



http://athenapower.us/products/power\_supply /tfx-compatibility.htm



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