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**TOUGHPOWER SERIES**  
POWER SUPPLY

**TOUGHPOWER GF A3**



# TOUGHPOWER GF A3

## 750W

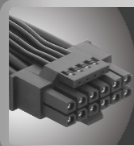
# DATASHEET



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# TOUGHPOWER SERIES POWER SUPPLY

## TOUGHPOWER GF A3



PCIe Gen 5 Ready  
16-PIN Connector



**ATX 3.0** Compatible

**Smart Zero Fan**

**Main Japanese  
Capacitors**

**10 YEAR  
Warranty**

### Features

- Compatible with Intel ATX 3.0 specification and designed with native PCIe Gen 5.0 12+4pin modular interface.
- 750W continuous output at 45°C/113°F operating environment.
- Fully Modular: High efficiency Zero Cable Platform with premium build quality.
- High quality Japanese 105°C/221°F main capacitors.
- Smart Zero Fan: Minimizes undesired noise.
- The voltage regulation are compatible with Intel standard.
- Ultra Quiet 120mm fluid bearing fan delivers excellent airflow.
- High amperage single +12V rail design.
- Intel C6/C7 states & ErP ready
- Built-in industry grade protections: OCP, OVP, UVP, OPP, SCP, OTP.
- Compact Sizing: 150mm(W)x86mm(H)x140mm(D).
- Safety approvals: FCC/ICES/CB/cTUVus certifications.



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## Highlighted Features

### Fully Compatible With ATX 3.0 Specifications

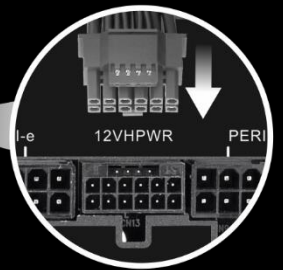
Meets all the needs of a computer system, providing powerful and stable power.

- Supports 200% power excursion
- Reaches 60% low load efficiency
- Complies with required power supply timing standards
- Designed with native 12+4pin 12VHPWR, and bundled with a PCIe Gen 5 cable

**ATX 3.0** Compatible



**PCIe Gen 5** Ready  
16-PIN Connector





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## Highlighted Features

### Main Japanese Capacitors

### High Quality Japanese 105°C/221°F Main Capacitors

Improves the durability and offers the highest stability and reliability.

### Smart Zero Fan

### Ultra Quiet Smart Zero Fan

Adjusts the fan speed and minimizes undesired noise.



### Fully Modular, Low-Profile Flat Black Cables

Makes cable management easier, reduces clutter and increases airflow inside the chassis.

### High Amperage Single +12V Rail & DC to DC Design

Powerful single +12V rail and DC to DC design for the best compatibility.

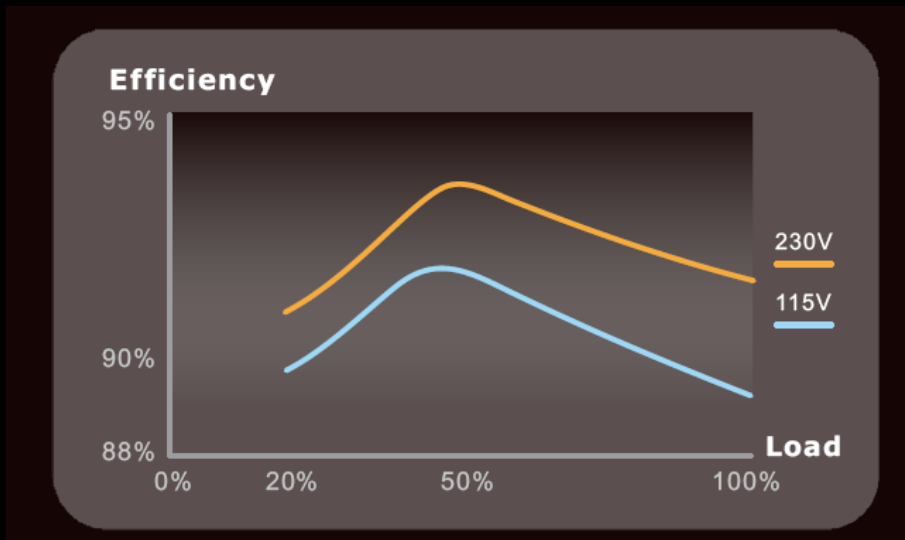


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## Eco Design



### **80 PLUS® Golf Certified Efficiency**

Delivers top end efficiency under real world load conditions.

### **Supports Energy Star 5.0\* energy standard**

Toughpower GF A3 series is suitable for use in Energy Star-compatible computers.

### **Supports Intel Deep Power Down C6 Status**

Helps your PC system operate more power efficiently.

### **Corresponds to the EU directives on WEEE and RoHS**

Thermaltake considers its full impact on the environment during manufacturing and maintains green facilities to ensure Toughpower GF A3 series meets WEEE & RoHS requirements.



# TOUGHPower SERIES

## POWER SUPPLY

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# TOUGHPower GF A3

## Specification

|                    |                          |     |       |      |       |
|--------------------|--------------------------|-----|-------|------|-------|
| AC Input           | Input Voltage: 100-240V~ |     |       |      |       |
|                    | Input Current: 15A-8A    |     |       |      |       |
|                    | Frequency: 50Hz/60Hz     |     |       |      |       |
| DC Output          | +3.3V                    | +5V | +12V  | -12V | +5VSB |
| Max Output Current | 20A                      | 20A | 62.5A | 0.3A | 3A    |
| Max Output Power   | 100W                     |     | 750W  | 3.6W | 15W   |
| Total Power        | 750W                     |     |       |      |       |

### GENERAL INFO

|                      |                           |
|----------------------|---------------------------|
| P/N                  | PS-TPD-0750FNFAGU-L       |
| Model                | TTP-0750AH2FLG            |
| Max. Output Capacity | 750W                      |
| Color                | Black                     |
| Dimension            | 150mm(W)x86mm(H)x140mm(D) |
| PFC                  | Active PFC                |
| Power Good Signal    | 100-150 msec              |
| Hold-Up Time         | > 17msec                  |
| Cooling System       | 12cm FDB Fan              |
| Weigh (Main Body)    | 1.54 KG                   |

### ENVIRONMENT

|                       |                            |
|-----------------------|----------------------------|
| Operating Temperature | 5°C to + 45°C              |
| Operating Humidity    | 20% to 85%,non-condensing  |
| Storage Temperature   | -40°C to + 55°C            |
| Storage Humidity      | 10% to 95%, non-condensing |

### MISCELLANEOUS

|                 |                                     |
|-----------------|-------------------------------------|
| Efficiency      | Meet 80 PLUS® Gold at 115Vac input. |
| MTBF            | 100,000 hrs minimum                 |
| Safety Approval | FCC/ICES/CB/cTUVus                  |

### PCIe CONNECTOR

|                     |   |
|---------------------|---|
| PCIe 6+2pin         | 4 |
| PCIe 12+4pin (300W) | 1 |


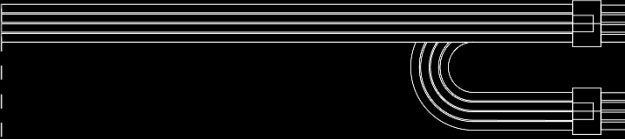
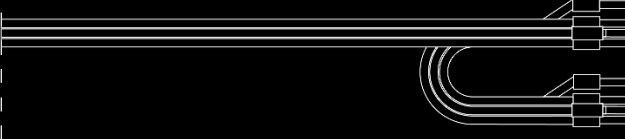
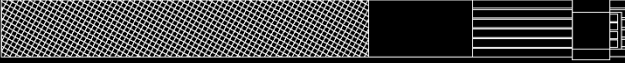
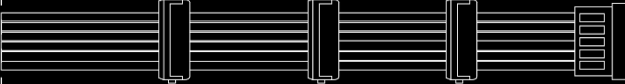
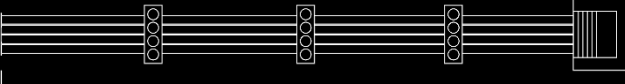
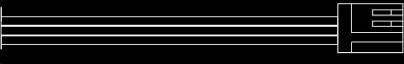


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### Connector and Cable Specification

| Connector Type      | Connector Quantity |   | Cable Quantity | Cable Length                |
|---------------------|--------------------|---|----------------|-----------------------------|
| Main Power (24Pin)  | X 1                |    | X 1            | 600mm                       |
| ATX 12V (4+4Pin)    | X 2                |    | X 1            | 650mm+150mm                 |
| PCIe (6+2Pin)       | X 4                |   | X 2            | 500mm+150mm                 |
| PCIe (12+4Pin) 300W | X 1                |  | X 1            | 600mm                       |
| SATA (5Pin)         | X 8                |  | X 2            | 500mm+150mm<br>+150mm+150mm |
| Peripheral (4Pin)   | X 4                |  | X 1            | 500mm+150mm<br>+150mm+150mm |
| FDD Adapter         | X 1                |  | X 1            | 150mm                       |



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### Total Protection

| Protections                 | Voltage Source  |           |            |
|-----------------------------|---|-----------|------------|
|                             | +3.3V   | +5V       | +12V       |
| Over Voltage Protection     | 3.76~4.3V   | 5.74~7.0V | 13.4~15.6V |
| Under Voltage Protection    | 2.0~2.6V  | 3.3~3.9V  | 8.5~9.7V   |
| Over Current Protection     | 24~32A  | 24~32A    | 100~125A   |
| Over Power Protection       | Protection at 160%~200% over peak load.   |           |            |
| Over Temperature Protection | Protection temperature is 55°C~65°C   |           |            |
| Short Circuit Protection    | Short circuit placed on +5V,+12V,+3.3V,-12V will latch off. +5VSB will auto-recovery. |           |            |