

TOUGHPOWER GF3 1000W







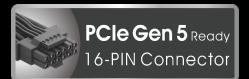
DATASHEET

P/N: PS-TPD-1000FNFAGx-4

Datasheet (2022.06)



TOUGHPOWER GF3 1000W



ATX 3.0 Compatible

Smart Zero Fan

100% Japanese Capacitors

1 O YEAR Warranty





Features

- PCIe Gen 5 ready, designed with native PCIe 12+4pin modular interface.
- Compatible with Intel ATX 3.0 specification.
- 80 PLUS Gold Certified up to 90% efficiency.
- 135mm fluid bearing fan.
- 100% Premium quality 105°C Japanese capacitors.
- < 30mV low ripple noise design.
- Extremely strict voltage regulation $< \pm 2\%$.
- >17ms hold-up time.
- Fully modular low-profile flat black cables.
- Smart Zero Fan: Minimizes undesired noise.
- High amperage single +12V rail design.
- DC-DC design for more precise electrical output.
- Intel C6/C7 states & ErP ready.
- Built-in industry grade protections: OCP, OVP, UVP, OPP, SCP, OTP.
- Dimensions: 150mm(W)x86mm(H)x160mm(D).
- Safety approvals: CE/UKCA/cTUVus/TÜV/FCC/IC/BSMI/EAC/CB/CCC certifications.



TOUGHPOWER GF3 1000W

Highlighted Features

ATX 3.0 Compatible

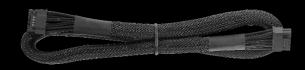
Fully Compatible With ATX 3.0 Specifications Meets all the needs of a computer system, providing powerful and stable power.

- Supports 200% power excursion
- Reaches 70% low load efficiency
- Complies with required power supply timing standards





Designed with native 12+4pin 12VHPWR, and bundled with a PCIe Gen 5 cable

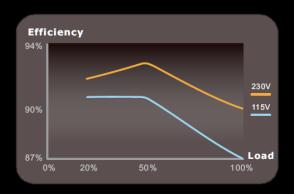






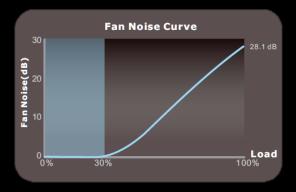
TOUGHPOWER GF3 1000W

Highlighted Features



80 PLUS Gold Certified Efficiency

Delivers top end efficiency under real world load conditions.



Ultra Quiet Smart Zero Fan

Minimize undesired noise.



< 30mV Low Ripple Noise Design

Top-end build quality with low ripple noise.



Extremely Strict Voltage Regulation < ±2%

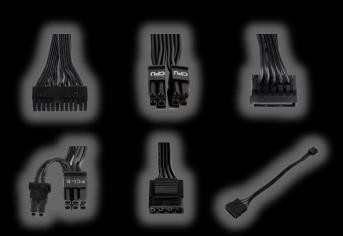
Provides steady clean power through exceptional voltage stability.



TOUGHPOWER GF3 1000W

Highlighted Features





Fully Modular, Low-Profile Flat Black Cables

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



100% High Quality Japanese 105°C/221°F Capacitors.

Improves the durability and offers the highest stability and reliability.



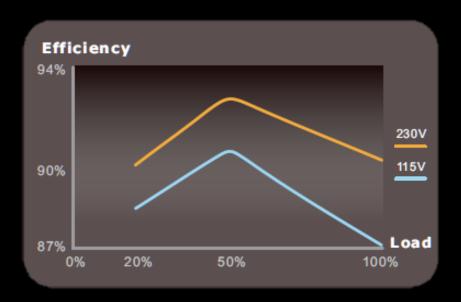
High Amperage Single +12V Rail & DC to DC Design

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



TOUGHPOWER GF3 1000W

Eco Design



80 PLUS®Gold Certified Efficiency

Delivers top end efficiency under real world load conditions.

Supports Energy Star 5.0* energy standard

Toughpower GF3 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 GF3 series meets WEEE & RoHS requirements.



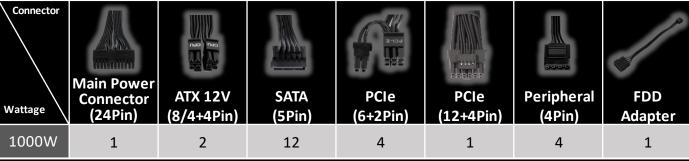
TOUGHPOWER GF3 1000W

Output Specification

P/N: PS-TPD-1000FNFAGx-4

W. Carlotte Control of the Control o					
AC Input	Input Voltage: 100V - 240V~ Input Current: 13.0A / 6.5A Frequency: 50/60Hz			Transfer GF3 1000W	
DC Output	+3.3V	+5V	+12V	-12V	+5VSB
Max Output Current	22.0A	22.0A	83.5A	0.3A	3.0A
Max Output Power	120W		999.6W	3.6W	15W
Total Power	1000W				

Connector Specification



Wattage	Connector Type	Connector Quantity & Cable Length		
1000W	Main Power (24Pin)	1 x 24Pin Main connector (600mm)		
	ATX 12V (8/4+4Pin)	1 x ATX 12V 8Pin connector (700mm) 1 x ATX 12V 4+4Pin connectors (700mm)		
	PCIe (6+2Pin)	2 x PCle 6+2Pin connectors (500mm + 150mm) 2 x PCle 6+2Pin connectors (500mm + 150mm)		
	PCle (12+4Pin)	1 x PCIe 12+4Pin connectors (500mm)		
	SATA	4 x SATA connectors (500mm + 150mm + 150mm + 150mm) 4 x SATA connectors (500mm + 150mm + 150mm + 150mm) 4 x SATA connectors (500mm + 150mm + 150mm + 150mm)		
	Peripheral	4 x Peripheral connectors (500mm + 150mm + 150mm + 150mm)		
	Floppy Adapter	1 x Peripheral to floppy adapter cable (100mm)		



TOUGHPOWER GF3 1000W

GENERAL INFO							
P/N	PS-TPD-1000FNFAGx-4						
Model	TPD-1000AH3FCG						
Max. Output Capacity	1000W						
Color	Black						
Dimension (W/H/D)	150mm(W) x 86mm(H) x 160mm(D)						
Weigh (Main Body)	1.79 KG						
PFC	Active PFC						
Power Good Signal	100-150 msec						
Hold-Up Time	> 17msec at 100% of full load						
AC INPUT							
Input Current	13.0A / 6.5A						
Input Frequency Range	50/60Hz						
Input Voltage	100V - 240V~						
ENVIRONMENTAL							
Operating Temperature	0°C to + 40°C						
Operating Humidity	20% to 90%,non-condensing						
Storage Temperature	-20°C to + 70°C						
Storage Humidity	5% to 95%, non-condensing						
Cooling System	13.5cm fluid bearing fan						
	MISCELLANEOUS						
Efficiency	Meet 80 PLUS®Gold at 115Vac input.						
MTBF	100,000 hrs minimum						
Safety Approval	CE/UKCA/cTUVus/TÜV/FCC/IC/BSMI/EAC/CB/CCC						
	PCIe CONNECTOR						
PCIe 6+2pin	4						
PCIe 12+4pin	1						



TOUGHPOWER GF3 1000W

Total Protection

Protections	Voltage Source				
Trotections	+3.3V	+5V	+12V		
Over Voltage Protection	3.76V~4.5V	5.74V~7.0V	13.4V~15.6V		
Under Voltage Protection	2.83V	4.47V	9.80V		
Over Current Protection	180% max.	180% max.	150% max.		
Over Power Protection	Protect at 110%~150% over peak load.				
Over Temperature Protection	Protection temperature is 50°C to 70°C at 115V and full load.				
Short Circuit Protection	Activated when any DC rails short circuited.				