



thermaltake

TOUGHPOWER SERIES
POWER SUPPLY

TOUGHPOWER GX3



TOUGHPOWER GX3 850W

DATASHEET



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TOUGHPOWER SERIES
POWER SUPPLY

TOUGHPOWER GX3



PCIe Gen 5 Ready
16-PIN Connector

ATX 3.0 Compatible

5 YEAR
Warranty



Features

- Compatible with Intel ATX 3.0 specification and designed with native PCIe Gen 5.0 12+4pin connector.
- 850W continuous output at 40°C/104°F operating environment.
- >17ms hold-up time.
- The voltage regulation are compatible with Intel standard.
- Ultra Quiet 120mm fluid bearing fan delivers excellent airflow.
- 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.
- Dimension: 150mm(W)x86mm(H)x140mm(D).



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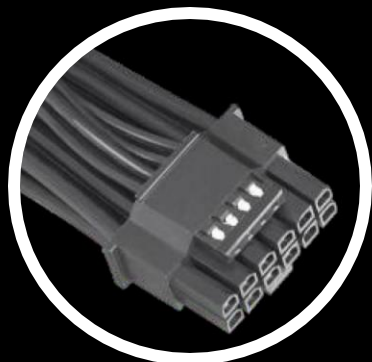
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POWER SUPPLY

TOUGHPOWER GX3

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 connector.

ATX 3.0 Compatible



PCIe Gen 5 Ready
16-PIN Connector

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

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

Low-Profile Flat Black Cables

Makes cable management easier.



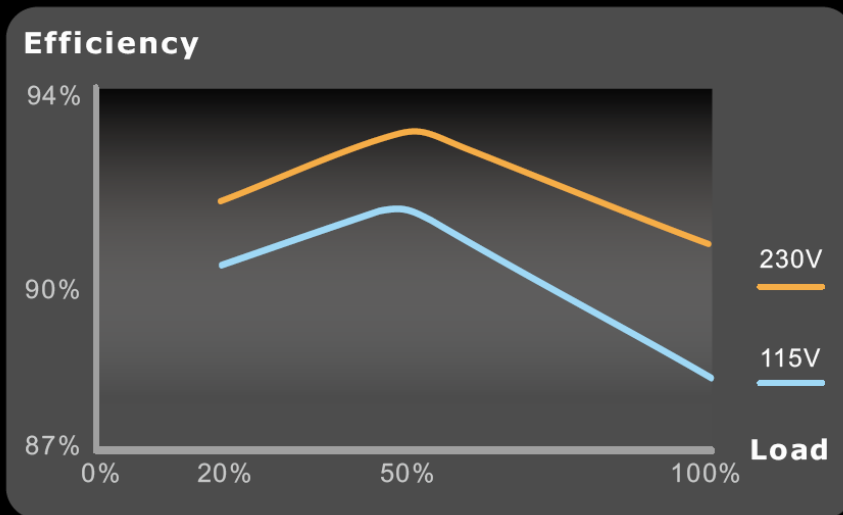


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Eco Design



80 PLUS® Gold Certified Efficiency

Delivers top end efficiency under real world load conditions.

Supports Energy Star 5.0* energy standard

Toughpower GX3 series is suitable for use in Energy Star-compatible computers.

Supports Intel Deep Power Down C6 Status

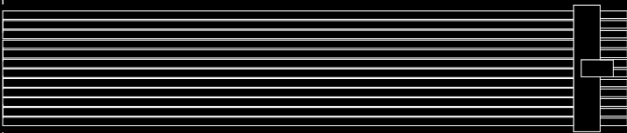

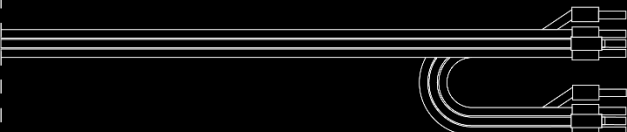
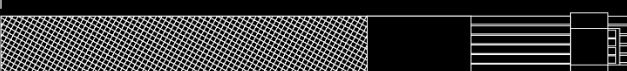
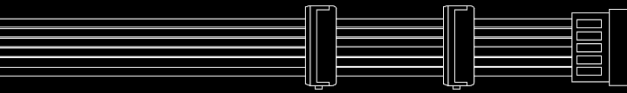
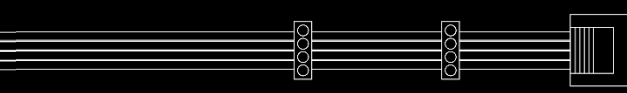
Helps your PC system operate more power efficiently.

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 GX3 series meets WEEE & RoHS requirements.



Connector and Cable Specification

Connector Type	Connector Quantity		Cable Quantity	Cable Length
Main Power (24Pin)	X 1		X 1	500mm
ATX 12V (4+4Pin)	X 2		X 2	600mm
PCIe (6+2Pin)	X 4		X 2	500mm+150mm
PCIe (12+4Pin) 450W	X 1		X 1	600mm
SATA (5Pin)	X 6		X 2	400mm+150mm +150mm
Peripheral (4Pin)	X 3		X 1	400mm+150mm +150mm



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	70.8A	0.3A	3A
Max Output Power	100W		850W	3.6W	15W
Total Power	850W				

GENERAL INFO

P/N	PS-TPD-0850NNFAGx-3, PS-TTP-0850NNFAGx-1
Model	TPD-850AH2NLG
Max. Output Capacity	850W
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
Protection	OVP/UVP/OCP/OPP/OTP/SCP

ENVIRONMENT

Operating Temperature	5°C to + 40°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/S-mark

PCIe CONNECTOR

PCIe 6+2pin	4
PCIe 12+4pin (450W)	1



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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	113~142A
Over Power Protection	Protection at 160%~200% over peak load.		
Over Temperature Protection	Protection temperature is 45°C~55°C		
Short Circuit Protection	Short circuit placed on +5V,+12V,+3.3V,-12V will latch off. +5VSB will auto-recovery.		