

PRO87+ Power Supply Series

PRO 87+
500W/600W



Features

80PLUS® Gold

87 to 93 percent efficiency @ 230V and 20 to 100 percent load. 80PLUS® Gold certified.

Dynamic Hybrid Transformer Topology

Technological breakthrough topology using a staged dynamic transformer array for extremely high efficiency with the most durable and stable output at any load.

Intel ATX12V v2.3

Compliant with latest desktop power supply design guide. Full support of most current CPU: Intel® Core 2 Duo™ / Quad™ / Extreme™ / i7™ / i5™ / i3™ and AMD® Athlon™ 64X2/X4 or Phenom™ X3/X4.

Stable and reliable power

Three high-performance and massive 12V rails. Extremely low ripple noise.

DX11 ready!

Full support of most current DX11 graphics cards due to minimum two 6+2P (8P) PCI-E connectors.

Full graphics power

Supports SLI™ and CrossFireX™ systems.

C6 & Hybrid Support

Supports energy saving modes of current and future CPU & GPU generations (C6 & Hybrid Mode) due to ZERO LOAD Design (no minimum load).

Air Cooling by Enermax

Integrated 13.9cm fan with patented Twister Bearing Technology ensures efficient and ultra silent cooling and long lifetime (100,000 hours MTBF).

SpeedGuard

Unmatched 330RPM at low loads. Path breaking and leading patented fan control for optimal cooling and minimum noise.

HeatGuard

Keeping PSU fan running for 30-60 seconds after shut down to dissipate the remaining system heat and prolonging system lifetime.

Hybrid Capacitor Array

High-performance capacitor array of heavy-duty solid state capacitors and Japanese electrolytic capacitors to ensure tightest DC stability and regulation.

SafeGuard

Industry-leading octuple protection circuitry of OCP, OVP, AC UVP, DC UVP, OPP, OTP, SCP & SIP.

CordGuard

Fixing the AC cord tightly to avoid accidental shutdowns of your PC.

Non-stop @ 50°C

Non-Stop industrial class performance at 50°C ambient.







Worldwide Compatibility

100-240V AC input with automatic adjustment and up to 99% active Power Factor Correction (PFC) for global usage.

Dimensions (W x H x D) 150mm x 86mm x 160mm

5 years manufacturer warranty

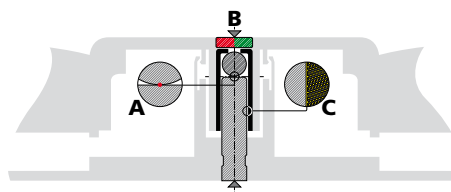
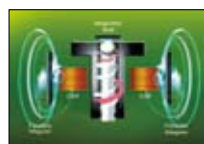
Cables & Connectors

		EPG500AWT	EPG600AWT
ATX12V 24 Pin		1x 55cm	1x 55cm
CPU 4+4 Pin		1x 60cm	1x 60cm
PCI-E 2.0 6+2 Pin		2x 45 / 45cm	4x 45 / 45 / 50 / 50cm
SATA		6x 2x 45 / 2x 60 / 75 / 90cm	7x 3x 45 / 3x 60 / 75cm
4 Pin Molex		5x 45 / 60 / 2x 75 / 90cm	6x 45 / 60 / 2x 75 / 2x 90cm
FDD		1x 90cm	1x 105cm

Specifications

EPG500AWT			EPG600AWT	
AC Input Rating				
Input Voltage	100-240VAC, 50-60Hz, Active PFC			
Input Current	6.5–3A		8–3.5A	
DC Output Rating				
+3.3V	20A	100W	24A	120W
+5V	20A		24A	
+12V1	25A	492W (41A)	25A	600W (50A)
+12V2	25A		25A	
+12V3	25A		25A	
-12V	0.5A	6W	0.5A	6W
+5Vsb	3A	15W	3A	15W
Total Power	500W		600W	
Peak Power	550W		660W	

Twister Bearing Technology



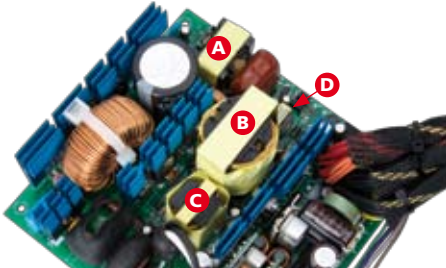
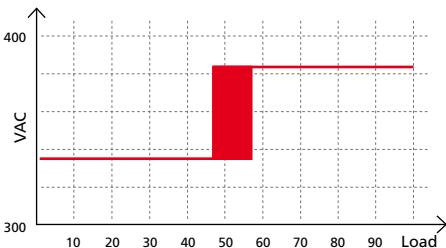
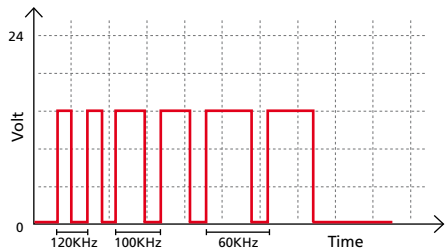
- A** Minimal contact area
For an effective noise reduction
- B** Rotor with integrated magnet
For a frictionless and smooth motion
- C** Self-lubricating bearing sleeve
Abrasion protection for a longer lifetime

Twister Bearing Technology (patented)
Persistent low noise level. Longer life: up to 100.000 hours MTBF

Dynamic Hybrid Transformer Topology (DHT)

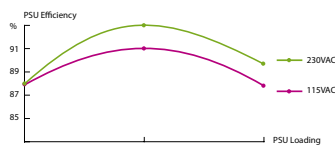
All current options for further improvement of the PSU DC stage have been exhausted. For this reason, PSU manufacturers focus on the development of more efficient AC technologies. With the so-called "Dynamic Hybrid Transformer Topology" Enermax made the breakthrough: It is based on three pathbreaking innovations:

DYNAMIC HYBRID TRANSFORMER TOPOLOGY

DYNAMIC RESONANT TRANSFORMER ARRAY	DYNAMIC VOLTAGE BOOSTING TRANSFORMING	DYNAMIC FREQUENCIES TRANSFORMING
<p>Enermax implemented a so-called Dynamic Resonant Transformer Array. It is based on the high-efficient resonant topology which is used for example in LCD monitors. The most noticeable modification on PCB is an additional resonant choke.</p> <p>A RESONANT CHOKE C DRIVER TRANSFORMER B MAIN TRANSFORMER D STANDBY TRANSFORMER</p> 	<p>Initially, the capacitors are charged with alternating current (AC) from the wall socket. They ensure the continuous AC supply of the transformers according to the DC consumption of the PC system. Up to now, capacitors have been charged statically, so that too much power got lost at low loads. The capacitors of Modu87+/Pro87+ series are charged with dynamic voltages – according to the required system power. That way, Enermax is able to increase the efficiency significantly.</p> 	<p>Transformers step the alternating current up or down. During this operation a part of the input power gets lost. Enermax managed to optimize the AC-to-DC conversion by the use of dynamic frequencies. The transformers work with a wider frequency range according to the variable power consumption of system components. That way, Enermax is able to reduce energy losses during AC-to-DC conversion radically.</p> 

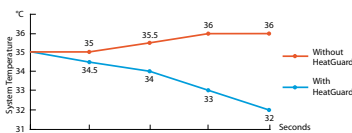
80PLUS® GOLD

Up to 93% efficiency at 230V



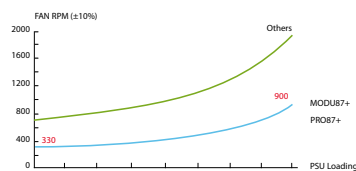
Leading technology for highest PSU efficiency.

HeatGuard



Keeping PSU fan running for 30-60 seconds after shut down to dissipate the remaining system heat.

SpeedGuard



Unmatched 330RPM at low loads. Path breaking and leading patented fan control for optimal cooling and minimum noise.

SafeGuard



Industry-leading octuple protection circuitry of OCP, OVP, AC UVP, DC UVP, OPP, OTP, SCP & SIP.

Certifications & Standards

