

SFX

PC POWER SUPPLY
850W

80 PLUS GOLD
FULL - MODULAR



FEATURES :

- 80 PLUS Gold Certified: High efficiency for lower energy costs
- Embossed Cable: Stylish, durable and flexible
- Fully Modular: Detachable cables for easy management
- 80 mm hydraulic bearing fan that supports 0 RPM mode
- Japanese Electrolytic Capacitors: Ensures reliability and longevity
- ATX 3.1 and PCIe 5.1 ready: Ensures reliable power delivery to your high-performance graphics card



SPECIFICATIONS

MODEL	PS-650SFX
POWER OUTPUT	650 W
INPUT VOLTAGE	100 - 240 VAC
INPUT FREQUENCY	50 - 60 Hz
MAX CURRENT	10 A
EFFICIENCY	92.3% at typical loading
DIMENSIONS (L x W x H)	125 x 100 x 63.5 mm
MODULAR	FULL - Modular
CERTIFICATIONS	80 PLUS GOLD
WARRANTY	7 years
PFC	Active PFC
FAN SIZE	80 mm hydraulic bearing
PROTECTIONS	UV, OVP, OPP, SCP, Lightning Protection
OPERATION TEMPERATURE	0 ~ 40°C
CIRCUIT STRUCTURE	LLC + DC-DC

DC OUTPUT	MAX LOAD (A)	MAX OUTPUT (W)
+3.3 V	20 A	100 W
+5 V	20 A	
+12 V	54 A	648 W
+5V SB	2.5 A	12.5 W
-12 V	0.3 A	3.6 W

SPECIFICATIONS

MODEL	PS-850SFX
POWER OUTPUT	850 W
INPUT VOLTAGE	100 - 240 VAC
INPUT FREQUENCY	50 - 60 Hz
MAX CURRENT	10 A
EFFICIENCY	92% at typical loading
DIMENSIONS (L x W x H)	125 x 100 x 63.5 mm
MODULAR	FULL-Modular
CERTIFICATIONS	80 PLUS GOLD
WARRANTY	7 years
PFC	Active PFC
FAN SIZE	80 mm hydraulic bearing
PROTECTIONS	UVP, OVP, OPP, SCP, Lightning Protection
OPERATION TEMPERATURE	0 ~ 40°C
CIRCUIT STRUCTURE	LLC + DC-DC

DC OUTPUT	MAX LOAD (A)	MAX OUTPUT (W)
+3.3 V	20 A	100 W
+5 V	20 A	
+12 V	70 A	840 W
+5V SB	2.5 A	12.5 W
-12V	0.3 A	3.6 W

SAFETY AND PROTECTION

Your new power supply unit comes equipped with multiple protective features to ensure safe and reliable operation:

Under-Voltage Protection (UVP) shuts the PSU off if the voltage the PSU is providing to the PC drops below accepted values.

Over-Voltage Protection (OVP) Monitors 12V, 5V, and 3.3V outputs. Automatically shuts down the PSU if voltage exceeds safe levels.

Over-Power Protection (OPP) Turns off the PSU if power draw reaches preset percentage of the rated capacity.

Short-Circuit Protection (SCP) Activates when output impedance falls below 0.1 ohms. Protects against shorts between rails or to ground, preventing damage to the PSU and system components.

Lightning Protection Automatically disconnects the PSU from the power source if a sudden surge or spike in voltage occurs due to lightning strikes, protecting the PSU and connected components from damage.

These safety mechanisms work together to protect your computer system and the power supply itself from potential electrical hazards. For optimal performance and longevity, always operate your PSU within its rated specifications



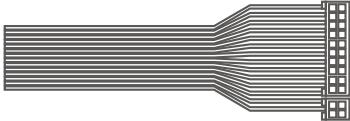
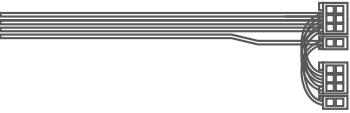
RoHS



SAA-202494-EA



CABLE INFORMATION

CONNECTORS	TOTAL LENGTH	CABLE QUANTITY
ATX Cable 24-pin (MB) 	300 mm	1
PCI-E Cable 8-pin (GPU 6 + 2) 	400 + 120 mm	1
PCI-E Cable 8-pin (GPU 6 + 2) 	400 mm	1
ATX 12V Cable 8-pin (CPU 4 + 4) 	450+100 mm	1
SATA Cable (SSD / HDD) 	500 mm	2
MOLEX Cable (4 PATA) 	500 mm	1
12V-2x6 GPU Cable 	720 mm	1

INSTALLATION GUIDE

Before you begin, ensure your system is powered off and unplugged from any power source.

Step 1: Removing the Existing PSU (Skip if building a new system)

1. Unplug the AC power cord from both the wall outlet and the current PSU.
2. Carefully disconnect all power cables from your components (GPU, motherboard, drives, etc.).
3. Remove the old PSU from your case following your chassis manual instructions.

Step 2: Installing Your New PSU

1. Verify the PSU's AC power cable is disconnected.
2. Mount the new PSU in your case using the provided screws.
3. Connect the main power cables:
 - Attach the 24-pin ATX cable to your motherboard.
 - Connect the CPU power cable (4-pin, 8-pin, or 4+4-pin) as required by your motherboard.
4. Connect component power cables:
 - SATA power cables to SSDs, HDDs, and optical drives.
 - PCIe or 12V-2x6 cables to your graphics card(s) if needed.
 - Peripheral (Molex) cables to any components requiring them.
5. Double-check all connections are secure.
6. Organize cables for optimal airflow, using cable management features in your case.
7. Connect the AC power cord to the PSU, but don't plug it into the wall yet.

Important Notes:

- Use only the cables provided with your new PSU to ensure compatibility and safety.
- Refer to your motherboard and GPU manuals for specific power requirements.
- Store unused modular cables safely for future upgrades.

After installation, ensure all components are properly connected before powering on your system.



P/N LIST

MODEL	PART NUMBER	EAN - 13	CABLE
850W BLACK	SFX-GLD-850-BK-CN	6974418983931	CN Power Cable
	SFX-GLD-850-BK-US	6974418988196	US Power Cable
	SFX-GLD-850-BK-EU	6974418988202	EU Power Cable
	SFX-GLD-850-BK-AU	6974418988219	AU Power Cable
	SFX-GLD-850-BK-UK	6974418988226	UK Power Cable
	SFX-GLD-850-BK-BR	6974418988240	BR Power Cable
850W WHITE	SFX-GLD-850-WH-CN	6974418988257	CN Power Cable
	SFX-GLD-850-WH-US	6974418988264	US Power Cable
	SFX-GLD-850-WH-EU	6974418988271	EU Power Cable
	SFX-GLD-850-WH-AU	6974418988288	AU Power Cable
	SFX-GLD-850-WH-UK	6974418988295	UK Power Cable
	SFX-GLD-850-WH-BR	6974418988301	BR Power Cable