

# SFX

PC POWER SUPPLY  
650W

**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



# SPECIFICATIONS

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

<b>DC OUTPUT</b>	<b>MAX LOAD (A)</b>	<b>MAX OUTPUT (W)</b>
+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

# 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.

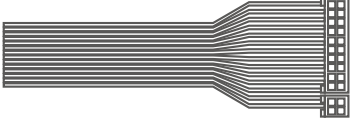





These safety mechanisms work together to protect your computer system and the power supply itself from potential electrical hazards. For optimal performance and longevity, always operate your PSU within its rated specifications



RoHS



# CABLE INFORMATION

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

<b>MODEL</b>	<b>PART NUMBER</b>	<b>EAN - 13</b>	<b>CABLE</b>
<b>650W</b>	SFX-GLD-650-BK-CN	6974418988448	CN Power Cable
	SFX-GLD-650-BK-US	6974418989735	US Power Cable
	SFX-GLD-650-BK-EU	6974418984105	EU Power Cable
	SFX-GLD-650-BK-AU	6974418984112	AU Power Cable
	SFX-GLD-650-BK-UK	6974418984136	UK Power Cable
	SFX-GLD-650-BK-BR	6974418984129	BR Power Cable