

# ACK

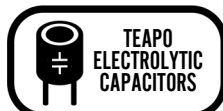
SERIES

## 80 PLUS GOLD



### Features:

- Full modular design
- ATX 3.1 and PCI-E 5.1 ready
- Embossed Cable: Stylish, durable, and flexible
- Teapo electrolytic capacitors
- 14 mm hydraulic bearing fan
- 80 PLUS and Cybenetics Gold certified
- 7-year warranty for peace of mind



# SPECIFICATIONS

|                        |                               |
|------------------------|-------------------------------|
| MODEL                  | HA-750BA2                     |
| POWER OUTPUT           | 750 W                         |
| INPUT VOLTAGE          | 100 - 240 VAC                 |
| INPUT FREQUENCY        | 47 - 63 Hz                    |
| MAX CURRENT            | 10 A                          |
| EFFICIENCY             | 91.07% at typical loading     |
| DIMENSIONS (L x W x H) | 145 x 150 x 86 mm             |
| MODULAR                | Full Modular                  |
| CERTIFICATIONS         | 80 PLUS Gold, Cybenetics Gold |
| WARRANTY               | 7 years                       |
| PFC                    | Active PFC                    |
| FAN SIZE               | 140 mm hydraulic bearing      |
| PROTECTIONS            | OVP, OPP, SCP, OCP, UVP, OTP  |
| OPERATION TEMPERATURE  | 0 ~ 40°C                      |
| CIRCUIT STRUCTURE      | LLC + DC-DC                   |






| DC OUTPUT | MAX LOAD (A) | MAX OUTPUT (W) |
|-----------|--------------|----------------|
| +3.3V     | 20 A         | 100 W          |
| +5 V      | 20 A         |                |
| +12 V     | 62 A         | 744 W          |
| +5VSB     | 2.5 A        | 12.5 W         |
| -12V      | 0.3 A        | 3.6 W          |

# SPECIFICATIONS

|                        |                               |
|------------------------|-------------------------------|
| MODEL                  | HA-850BA2                     |
| POWER OUTPUT           | 850 W                         |
| INPUT VOLTAGE          | 100 - 240 VAC                 |
| INPUT FREQUENCY        | 47 - 63 Hz                    |
| MAX CURRENT            | 10 A                          |
| EFFICIENCY             | 91.42% at typical loading     |
| DIMENSIONS (L x W x H) | 145 x 150 x 86 mm             |
| MODULAR                | Full Modular                  |
| CERTIFICATIONS         | 80 PLUS Gold, Cybenetics Gold |
| WARRANTY               | 7 years                       |
| PFC                    | Active PFC                    |
| FAN SIZE               | 140 mm hydraulic bearing      |
| PROTECTIONS            | OVP, OPP, SCP, OCP, UVP, OTP  |
| OPERATION TEMPERATURE  | 0 ~ 40°C                      |
| CIRCUIT STRUCTURE      | LLC + DC-DC                   |

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

# CABLE INFORMATION

| CONNECTORS  | LENGTH | 750W | 850W |
|---|--------|------|------|
| ATX Cable 24-pin (MB)<br>            | 610 mm | 1    | 1    |
| ATX12V Cable 8-pin ( CPU 4+4)<br>    | 700 mm | 2    | 2    |
| PCI-E Cable 12V-2x6 (GPU 12+4)<br> | 700 mm | 1    | 1    |
| PCI-E Cable 8-pin ( GPU 6+2)<br>   | 750 mm | 2    | 3    |
| SATA + IDE Cable (SSD/HDD)<br>     | 450 mm | 2    | 2    |

# 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.

**Over-Current Protection (OCP)** Keeps 3.3V, 5V, and 12V rail outputs within safe operating limits.

**Over-Temperature Protection (OTP)** Shuts down the PSU if internal temperature becomes too high, typically due to overloading or fan failure.

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



# 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:**

Refer to your motherboard and GPU manuals for specific power requirements.

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

