ACK

POWER SUPPLY

80 PLUS NON-MODULAR



Feature:

- Active PFC
- Embossed cable
- 80 PLUS certified
- Dual forward topology
- 5-year warranty
- Multiple protections: OPP, OVP, SCP









SAFETY AND PROTECTION

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

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.

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.



ACK 550W SPECIFICATIONS

MODEL	HA-550AC1	
POWER OUTPUT	550 W	
INPUT VOLTAGE	200- 240V	
INPUT CURRENT	6 A MAX	
INPUT FREQUENCY	47-63 Hz	
EFFICIENCY	87% at typical load	
DIMENSIONS (L x W x H)	145 x 150 x 86 mm	
MODULAR	Non-modular	
CERTIFICATIONS	80 PLUS	
PFC	Active PFC	
FAN SIZE	140 mm hydraulic bearing	
PROTECTIONS	OVP, OPP, SCP	
REGULATORY	EAC/CE/FCC/UKCA/RoHS	
CIRCUIT STRUCTURE	Double forward topology	
WARRANTY	5 years	

DC OUTPUT	MAX LOAD (A)	MAX OUTPUT (W)	
+3.3V	15	100	
+5V	18		
+12V	44	528	
+5VSb	2.5	12.5	
-12V	0.3	3.6	



ACK 650W SPECIFICATIONS

MODEL	HA-650AC1	
POWER OUTPUT	650 W	
INPUT VOLTAGE	200- 240V	
INPUT CURRENT	6 A MAX	
INPUT FREQUENCY	47-63 Hz	
EFFICIENCY	87.5% at typical load	
DIMENSIONS (L x W x H)	145 x 150 x 86 mm	
MODULAR	Non-modular	
CERTIFICATIONS	80 PLUS	
PFC	Active PFC	
FAN SIZE	140 mm hydraulic bearing	
PROTECTIONS	OVP, OPP, SCP	
REGULATORY	EAC/CE/FCC/UKCA/RoHS	
CIRCUIT STRUCTURE	Double forward topology	
WARRANTY	5 years	

DC OUTPUT	MAX LOAD (A) MAX OUTPUT (W)		
+3.3V	21	120	
+5V	20		
+12V	52	624	
+5VSb	2.5	12.5	
-12V	0.3	3.6	



ACK 750W SPECIFICATIONS

MODEL	HA-750AC2	
POWER OUTPUT	750 W	
INPUT VOLTAGE	200- 240V	
INPUT CURRENT	10 A MAX	
INPUT FREQUENCY	50-60 Hz	
EFFICIENCY	88.5% at typical load	
DIMENSIONS (L x W x H)	145 x 150 x 86 mm	
MODULAR	Non-modular	
CERTIFICATIONS	80 PLUS	
PFC	Active PFC	
FAN SIZE	140 mm hydraulic bearing	
PROTECTIONS	OVP, OPP, SCP	
REGULATORY	EAC/CE/FCC/UKCA/RoHS/TUV	
CIRCUIT STRUCTURE	Double forward topology	
WARRANTY	5 years	

DC OUTPUT	MAX LOAD (A)	DAD (A) MAX OUTPUT (W)	
+3.3V	15	100	
+5V	15		
+12V	62	744	
+5VSb	2.5	12.5	
-12V	0.3	3.6	



ACK 550W CABLE INFORMATION

CONNECTORS	TOTAL LENGTH	QUANTITY
ATX Cable 24-pin	600 mm	1
ATX12V Cable 8-pin (4+4)	650 mm	1
PCI-E Cable 8-pin (6+2)	600 mm	1
SATA Cable + MOLEX (4 pin)	800 mm	2



ACK 650W CABLE INFORMATION

CONNECTORS	TOTAL LENGTH	QUANTITY
ATX Cable 24-pin	600 mm	1
ATX12V Cable 8-pin (4+4)	650 mm	1
PCI-E Cable 8-pin (6+2)	600 + 150 mm	1
SATA Cable + MOLEX (4 pin)	800 mm	2



ACK 750W CABLE INFORMATION

CONNECTORS	TOTAL LENGTH	QUANTITY
ATX Cable 24-pin	600 mm	1
ATX12V Cable 8-pin (4+4)	650 + 150 mm	1
PCI-E Cable 8-pin (6+2)	600 + 150 mm	1
SATA Cable + MOLEX (4 pin)	800 mm	2



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.
 - PCle power 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:

Please refer to your motherboard and GPU manuals for specific power requirements.

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

