SHP V2

ATX 2.3 POWER SUPPLY

Manual

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Dear Customer,

Thank you for your purchase of this high-quality SHARKOON product. To ensure a long service life, and full functionality of the product, we recommend that you read this manual thoroughly.

SHARKOON Technologies
www.sharkoon.com

1. General

Power	550 or 650 Watt
CPU	Compatible with the Latest Intel and AMD CPUs
PCIe Connectors	2x 6+2-Pin PCIe Connector
Fan	120 mm Fan
Efficiency	20% Load: Min. 82%
	50% Load: Min. 85%
	100% Load: Min. 82%

2. Specifications

2.1 Overview SHP550 V2

Model No.	SHP550 V2				
Input (AC)	Input Voltage		Current	Frequency	
	200-240 VAC		4 A	47-63 Hz	
Output (DC)	+3.3 V	+5 V	+12 V	-12 V	+5 Vsb
Max. Output Current	18 A	18 A	42 A	0.3 A	2.5 A
Max. Combined Power	110 W		504 W	3.6 W	12.5 W
Total Power	550 Watt				

2.2 Overview SHP650 V2

Model No.	SHP650 V2				
Input (AC)	Input Voltage		Current	Frequency	
	200-240 VAC		5 A	47-63 Hz	
Output (DC)	+3.3 V	+5 V	+12 V	-12 V	+5 Vsb
Max. Output Current	20 A	20 A	50 A	0.3 A	2.5 A
Max. Combined Power	120 W		600 W	3.6 W	12.5 W
Total Power	650 Watt				

2.3 Mains Voltage and Protections

This power supply works with 200-240 V. It is available with the following protective measures:

1. Over Power Protection (OPP)
   If a voltage rail draws in more electricity to the power supply than the specifications allow, the power supply will switch off.

2. Over Voltage Protection (OVP)
   This function protects against excessive voltage, preventing damage to the PC by switching off the power supply during a surge.

3. Short Circuit Protection (SCP)
   Should a short circuit occur with your PC, the SCP function switches off the power supply and protects the electronics from damage.

4. Under Voltage Protection (UVP)
   Should the power supply fall below a fixed number for the minimum voltage it will switch off automatically.

2.4 Safety Certifications

Out power supply is tested and complies with CE and CB safety certifications.

3. Package Contents

A SHP550 V2/SHP550 V2
B Mounting screws
C Power cord
D Manual

Note:
If you are missing any of the items listed above, please contact our customer service immediately:

support@sharkoon.com (Europe)
support@sharkoon.com.tw (International)

4. Cable Configuration
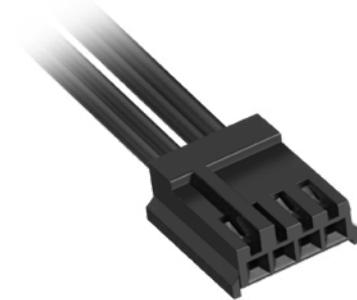
4.1 Connectors

1x 20+4-Pin Mainboard Connector

1x 4+4-Pin CPU Connector

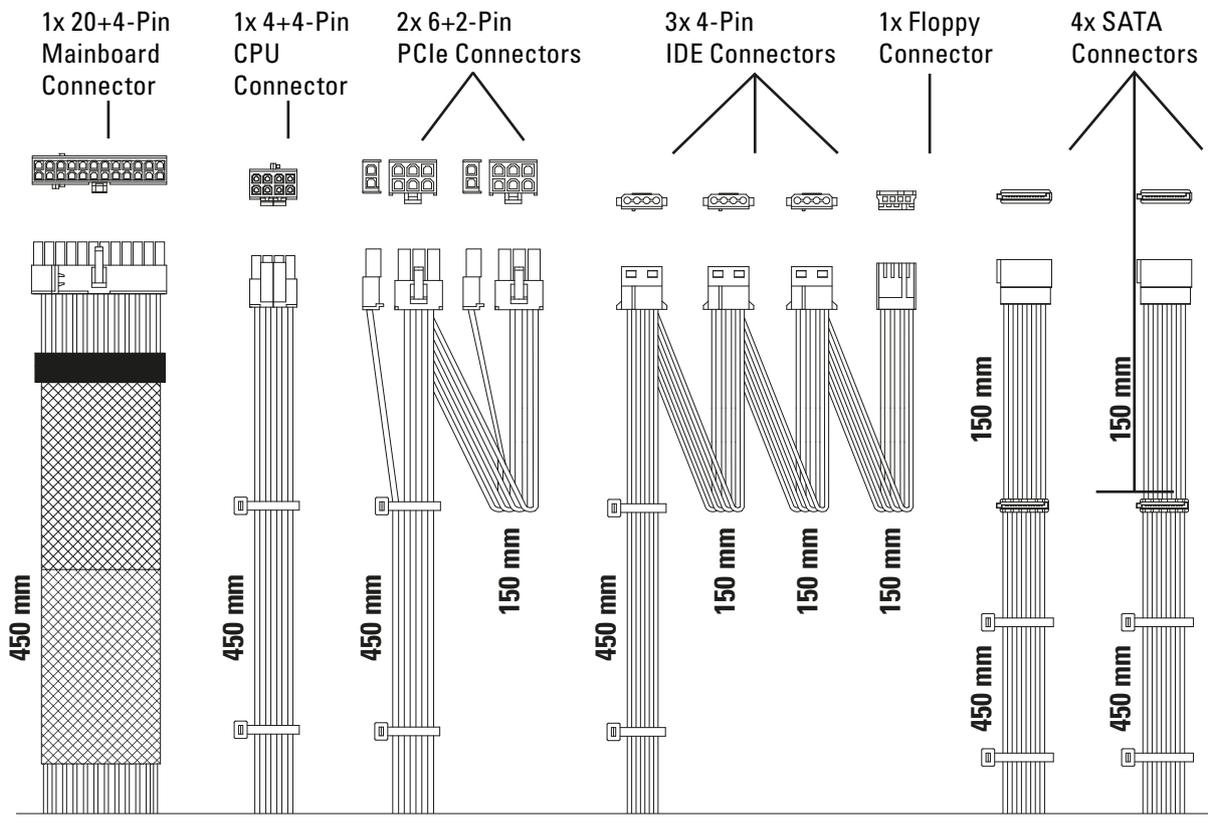2x 6+2-Pin PCIe Connectors

4x SATA Connectors

1x Floppy Connector

3x 4-Pin IDE Connectors

4.2 Cable Length

1x 20+4-Pin Mainboard Connector

1x 4+4-Pin CPU Connector

2x 6+2-Pin PCIe Connectors

3x 4-Pin IDE Connectors

1x Floppy Connector

4x SATA Connectors

450 mm

450 mm

450 mm

150 mm

450 mm

150 mm

150 mm

150 mm

150 mm

450 mm

150 mm

450 mm

5. Installation

If installing into an empty PC case please continue to section 5.1. If a power supply is already installed, remove it first from the case. To do so, proceed as follows:

1. Turn off your PC. Disconnect the power cord from the wall outlet and your power supply.
2. Open the PC case. For additional information, refer to the PC case's manual.
3. Disconnect all cables between the power supply and the other PC components (e.g. mainboard, HDDs, drives, fans, etc.).
4. Remove the mounting screws connecting the power supply to the PC case and then carefully remove the power supply from the case.

5.1 Installing a Power Supply into a PC Case

1. Insert the power supply into the PC case and place it against the power supply bracket on the rear panel. For additional information, refer to the PC case's manual.
2. Attach the power supply from the outside of the case using the provided screws. Ensure that the fan and air vents of the built-in power supply are not covered.

5.2 Connect the Mainboard and Graphics Card(s)

1. Plug the 20+4-pin mainboard connector (Fig. 1) into the respective port on the mainboard.
2. If your mainboard also features either a 4-pin or 4+4-pin CPU connector, connect the plug with the mainboard port (Fig. 2).

Note:
The power connection of the mainboard depends on the vendor and may vary. For detailed information on how to establish the connector, please refer to your mainboard's manual.

3. If your PCIe graphics card requires an additional power supply, connected the 6-pin or 6+2-pin PCIe connector to ensure the graphics card receives a stable power supply.

5.3 Connecting Optical Drives and Other Peripheral Devices

1. Connect the 4-pin IDE connector (Fig. 4), SATA connector (Fig. 5) and the 4-pin Floppy connector (Fig. 6) with the corresponding peripheral devices.

Note:
For additional information, refer to the respective manuals of your drives and peripheral devices.

Fig. 1:
20+4-Pin Mainboard Connector

Fig. 2:
4+4-Pin CPU Connector

Fig. 3:
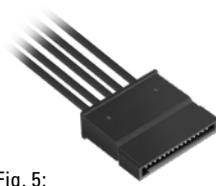6+2-Pin PCIe Connector

Fig. 4:
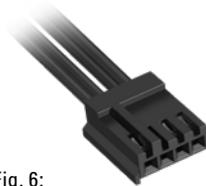4-Pin IDE Connector

Fig. 5:
SATA Connector

Fig. 6:
Floppy Connector

5.4 Checking All Connections

Ensure that all devices are properly connected. Close the PC case. Connect the power cord with the power supply and wall outlet. Turn the power supply on. This completes the installation of the power supply.

Note:
All connectors are designed to avoid misconnection. If the connectors are unable to connect to the mainboard, drives or peripheral devices, please check if both connectors are attached in the correct orientation. Do not force to plug the connectors within the incorrect orientation, nor modify any of the components, as this will damage the power supply and other hardware. SHARKOON warranty does not cover damage cause by incorrect handling.

6. Troubleshooting

If the power supply does not work properly, please check the following:

1. Is the power cord correctly inserted into a wall outlet and the power inlet of the power supply?
2. Ensure that the on/off switch is in the "I" position.
3. Check if the 20+4-pin mainboard connector and the 4+4-pin CPU connector are correctly attached to the mainboard.
4. Check if the cable is securely connected to the port of the peripheral devices.
5. Unplug the power cord from the wall outlet and let the power supply rest for about 10 minutes. This will trigger a reset of the protection circuitry.

If the system still does not start, please contact support@sharkoon.com.

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Disposal of your old product:

Your device has been designed and manufactured using high quality materials and components that can be recycled and reused.

When this crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2012/19/EU. Please be informed about the local separate collection system for electrical and electronic products. Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences to the environment and human health.

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