



SILENT STORM

SFX GOLD

Manual

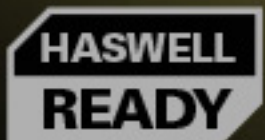




Table of Contents

1. Features	3
2. Specifications	4
2.1 Overview	4
2.2 Mains voltage and protective functions	4
2.3 Safety standards	5
2.4 Guarantee period	5
3. Package contents	6
4. The modular system of the power supply	7
4.1 The terminals on the power supply	7
4.2 The modular cables	7
4.3 Cable lengths	8
5. Installation	9
5.1 Installing the power supply into a PC case	9
5.2 Connecting mainboard and graphics card(s)	10
5.3 Connecting optical drives and other peripheral devices	11
5.4 Connecting the cables to the power supply	12
5.5 Checking all connections	12
6. Troubleshooting	12



Dear Customer,

Congratulations and 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.

We hope you enjoy our product!
SHARKOON Technologies

1. Features

CPU:	Supports Intel Haswell CPUs.
High Energy Efficiency:	This power supply is "80 PLUS Gold" certified and meets all requirements with an efficiency of at least 90% under 50% load and 87% under both 20% and 100% load.
Cable Management:	This power supply is equipped with a fully modular cable system. Thus the only cables used are those that are needed.
Guarantee:	3 year guarantee.
PCIe Connectors:	This power supply is equipped with two 6+2-pin PCIe connectors.
120 mm Fan:	Operating noise is effectively reduced due to the 120 mm fan.
Environmentally Friendly:	Certified to current energy and environmental standards.

Warning



To prevent the risk of electric shock, do not open the power supply case. No user-exchangeable parts are inside. Refer service and maintenance to authorized SHARKOON personnel. Guarantee is void under unauthorized attempt to open the power supply housing. Suitable for indoor or office use only. Keep the power supply away from humidity!



2. Specifications

2.1 Overview

Model No.	SilentStorm SFX 500 Gold				
Input (AC)	Input voltage		Current	Frequency	
	100 - 240 V		7 A	50 - 60 Hz	
Output (DC)	+5 V	+3.3 V	+12 V	-12 V	+5 Vsb
Max. Output Current	20 A	20 A	40 A	0.3 A	3 A
Max. Combined Power	105 W		480 W	3.6 W	15 W
Total Power	500 W				

2.2 Mains voltage and protective functions

This power supply works with 100 to 240 V (50/60 Hz) and is equipped with the following protective functions:

1. Over Current Protection (OCP)

Over Current Protection: If a voltage rail draws in more electricity to the power supply than the specifications allow, the power supply will switch off.

2. Over Temperature Protection (OTP)

Over Temperature Protection: The overheat protection circuit switches off the power supply to protect the electronics from damage when excessive heat is detected.

3. Over Power Protection (OPP)

Over Power Protection: Turns off the power supply when more power than allowed is being delivered to the system, thus protecting the electronics from damage.



4. Over Voltage Protection (OVP)

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

5. Under Voltage Protection (UVP)

Under Voltage Protection: If the power supply falls below a fixed number of the minimum voltage it will switch off automatically.

6. Short Circuit Protection (SCP)

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

2.3 Safety standards

Our power supply is certified to comply with CE, FCC, CB, BSMI and C-TICK regulations.

2.4 Guarantee period

For this power supply we provide a 3 year guarantee.





3. Package contents

- (A) SilentStorm SFX Gold
- (B) Power cable
- (C) Cable bag
- (D) Set of mounting screws
- (E) Cable ties
- (F) ATX bracket
- (G) Instructions
- (H) Set of modular cables:
 - 1x 20+4-pin mainboard connector
 - 1x 4+4-pin CPU power connector
 - 2x 6+2-pin PCIe connectors
 - 4x SATA power connectors
 - 2x 4-pin IDE power connectors
 - 1x Floppy power connector



Note:

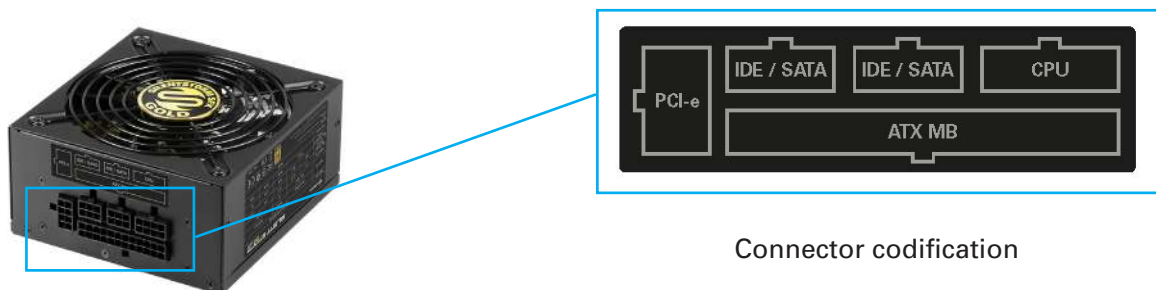
If you are missing any of the items listed above, please contact our customer service immediately:
support@sharkoon.com (Germany and Europe)
support@sharkoon.com.tw (international)



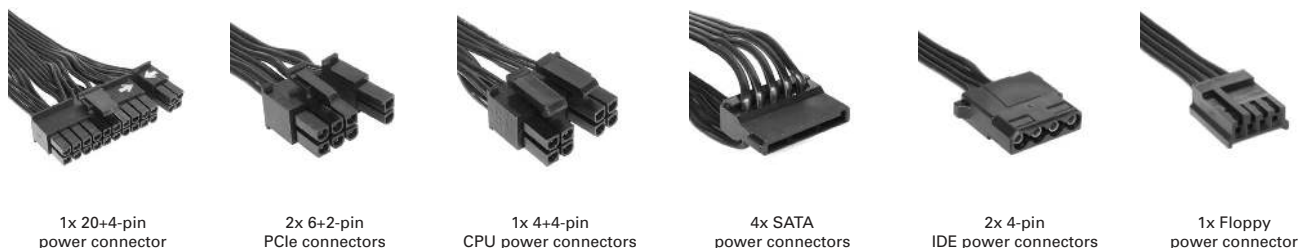
4. The modular system of the power supply

A special feature for the connection of peripheral devices is the so-called cable management. Thanks to this modular system only the required cables needed for the installation of components are used thus keeping the case tidy and optimizing the airflow within.

4.1 The terminals on the power supply



4.2 The modular cables

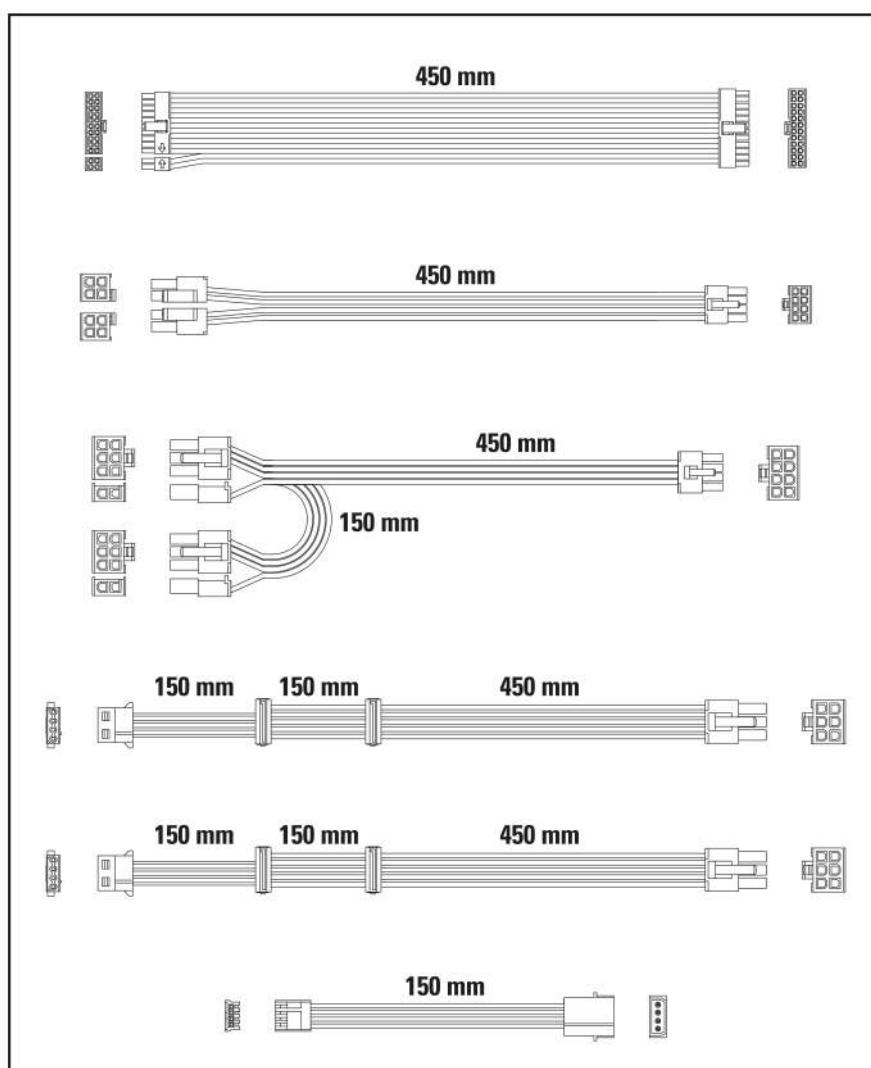


Attention!

Be advised that only the supplied cable set is allowed for use! The use of other cables (e.g. cables from older power supply series) can cause a defect!



4.3 Cable lengths





5. Installation

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

1. Switch off your PC. Disconnect the power cable from the wall outlet and your power supply. Unplug all cables connected to the PC case (e.g. keyboard, mouse, etc.).
2. Open the PC case (for additional information refer to the PC case's manual).
3. Disconnect all cable connections between the power supply and other PC components (e.g. mainboard, HDDs, drives, fans, etc.).
4. Remove the mounting screws connecting the power supply to the PC case and carefully remove the power supply from the case.

5.1 Installing the power supply into the PC case

1. Insert the power supply into the PC case and place it against the power supply bracket.
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.
3. If installing the power supply into an ATX case, please use the included ATX bracket (see 3). Attach the ATX bracket to the power supply using the supplied screws. The SFX power supply can then be screwed to the ATX case.



5.2 Connecting the mainboard and graphics card(s)

1. Plug the ATX power connector (fig. 1) to the respective jack on the mainboard.



Fig. 1

2. Plug the 4+4-pin CPU power connector (fig. 2) to the respective jack on the mainboard.



Fig. 2

Note:

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



3. Connect the 6+2-pin PCIe connector (fig. 3), if required, or additionally the second 6+2-pin PCIe connector with your graphics card(s).

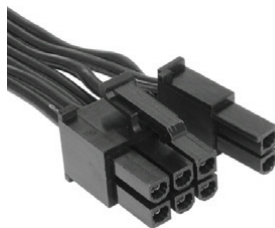


Fig. 3

5.3 Connecting optical drives and other peripheral devices

1. Connect the 4-pin IDE power connectors (fig. 4), SATA power connectors (fig. 5) or the Floppy power connector (fig. 6), as required, with the corresponding peripheral devices or drives.



Fig. 4



Fig. 5



Fig. 6

Note:

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



5.4 Connecting the cables to the power supply

Connect the modular cables to the power supply according to the connector coding (see above 4.1).

5.5 Checking all connections

Ensure that all devices are properly connected, then connect the power supply cable with the power supply and a power outlet. Turn the power supply on using the on/off switch located on back. This completes the installation of the power supply.



Power supply on/off switch

Note:

All connectors are fault-preventing designed to avoid misconnection. If you are unable to connect the male connector-to-female connector of the drive or peripheral, 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 guarantee does not cover damage cause by incorrect handling.

6. Troubleshooting

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

1. Is the power cable correctly connected to a wall outlet and the power supply's power connector?
2. Ensure that the on/off switch is in the "I" position.
3. Check if the main power connector is correctly plugged to the mainboard.
4. Check if the power connectors are properly connected to the peripheral devices, in case the short circuit protection function was activated when switching on the power supply.
5. Turn the power switch "off" and then back "on" several times, with a minimum cycle of 5 seconds.
6. If the system still does not start, please contact support@sharkoon.com.



Legal disclaimer:

For potential loss of data, especially due to inappropriate handling, SHARKOON assumes no liability.

All named products and descriptions are trademarks and/or registered trademarks of the respective manufacturers and are accepted as protected.

As a continuing policy of product improvement at SHARKOON, the design and specifications are subject to change without prior notice. National product specifications may vary.

The legal rights of the enclosed software belong to the respective owner. Please observe the license terms of the manufacturer before using the software.

All rights reserved especially (also in extracts) for translation, reprinting, reproduction by copying or other technical means. Infringements will lead to compensation.

Disposal of your old product:

Your product is designed and manufactured with high quality materials and components, which 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 2002/96/EC.

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.

© SHARKOON Technologies 2015
www.sharkoon.com