Sharkoon

REBEL P20 SFX

SFX 12V V4.1 Power Supply Unit

Manual

Safety Instructions

This device is only to be used as a power supply unit for powering PCs and is intended exclusively for this purpose. Even when it is not being used for a long period of time, a power supply unit can still possess a high electric charge. For your own safety, be sure to follow the instructions below before using the device. The manufacturer's guarantee will become void if damage occurs to the product as a result of improper use or non-compliance with the following safety instructions.

CAUTION!

- Only use the device with accessories approved by the manufacturer and do not unscrew or modify the device without the manufacturer's consent. Repairs must only be carried out by authorized specialist personnel.
- Do not use the device in extreme environments. Also make sure that it always has sufficient distance to household heating appliances and radiators and other such sources of heat.
- Do not insert any objects into the openings of the device.
- The device is only intended for indoor use and within the appropriate level of humidity. Keep liquids away from the device and do not touch it with wet hands.
- Immediately disconnect the device from your household electricity supply if it comes into contact with liquid, or if smoke occurs, or if you notice any damage, for example, to the cables. Do not then use the device again.
- Only the outside of the power supply unit may be cleaned and only using a dry cloth. Before doing this, completely disconnect the device from your household electricity supply by pressing the power switch to "O" and pulling the plug of the power cord out of your wall outlet.

Specifications

General:	750W	850W	1000W
Certification	Cybenetics Platinum	Cybenetics Platinum	Cybenetics Platinum
Form Factor	SFX 12V V 4.1	SFX 12V V 4.1	SFX 12V V 4.1
Continuous Power	750 W	850 W	1,000 W
ErP Compliant	✓	✓	✓
Technology	DC/DC	DC/DC	DC/DC
All Japanese Capacitors	✓	✓	✓
Zero RPM	✓	✓	✓
Fan Delay Mode	✓	✓	✓
MTBF	Min. 100,000 Hours	Min. 100,000 Hours	Min. 100,000 Hours
Operating Temperature	0 to +40 °C	0 to +40 °C	0 to +40 °C
Standby Power Consumption	Max. 0.25 W	Max. 0.25 W	Max. 0.25 W
Weight without Cables	1.0 kg	1.0 kg	1.0 kg
Dimensions (L x W x H)	100 x 125 x 63.5 mm	100 x 125 x 63.5 mm	100 x 125 x 63.5 mm
Housing Color	Black	Black	Black
Input:			
Voltage	100 – 240 VAC	100 – 240 VAC	100 – 240 VAC
Frequency	50 – 60 Hz	50 – 60 Hz	50 – 60 Hz
Input Current (110/230 V)	10 / 6 A	12 / 6 A	12 / 6 A
Output:			
12 V Rail(s)	1	1	1
Load 3.3 V	20 A	20 A	20 A
Load 5 V	20 A	20 A	20 A
Max. Combined Power 3.3 V + 5 V	100 W	100 W	100 W
Load 12 V1	62.5 A	70.8 A	83.3 A
Max. Combined Power 12 V	750 W	850 W	1,000 W
Load 5 V_{SB}	3.0 A	3.0 A	3.0 A
Load –12 V	0.3 A	0.3 A	0.3 A
Load 12V-2x6	450 W	450 W	600 W
Cable and Connectors:			
Cable Configuration	Fully Modular	Fully Modular	Fully Modular
Flat Cables	✓	✓	✓
Maximum Cable Length	78 cm	78 cm	78 cm
Length of Mainboard Cable	30 cm	30 cm	30 cm
Length of CPU Cable	42 cm	42 cm	42 cm
Length of 12V-2x6 Cable	42 cm	42 cm	42 cm
Length of PCIe Cable	42 cm + 15 cm	42 cm + 15 cm	42 cm + 15 cm
Cable Length to First Peripheral	32 cm	32 cm	32 cm
24-Pin Mainboard Connector	1	1	1
4+4-Pin CPU Connector	1	1	1
8-Pin CPU Connector	1	1	1
6+2-Pin PCIe Connector	2	2	2
12V-2x6 Connector	1	1	1
SATA Connector	8	8	8
IDE Connector	1	1	1
Fan:			
Fan Size	92 mm	92 mm	92 mm
Bearing Type	Fluid Dynamic Bearing	Fluid Dynamic Bearing	Fluid Dynamic Bearing
Safety Standards:			
CE	✓	✓	✓
FCC	✓	✓	✓
CB	✓	✓	✓

Package Contents:

Rebel P20 SFX 750/ 850/ 1000, Power Cord, Cable Bag, Set of Modular Cables, Mounting Screws, Cable Ties

Safety Standards and Protections

This power supply unit is designed for a household power voltage of 100–200 volts. It complies with CE, FCC and CB safety standards and is equipped with protection features that are designed to protect the device itself as well as the components connected to it. The device will unexpectedly shut down in the event of a protection function. You should then check immediately if there is a specific cause for the shutdown.

OPP (Over-Power Protection)
If the system demands more power than the specifications allow, the power supply unit will switch itself off to protect the electronics from damage.

OVP (Over-Voltage Protection) / UVP (Under-Voltage Protection)
This function shuts off the power supply unit to protect the components as soon as the internal voltage exceeds or falls below the specified limits.

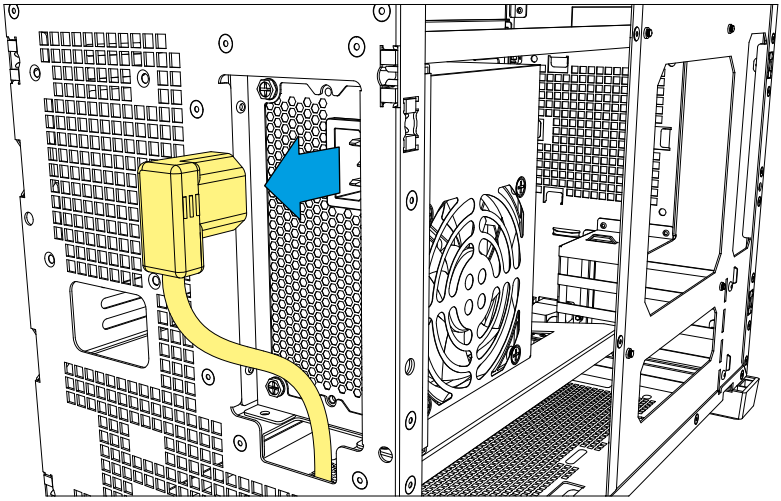
SCP (Short-Circuit Protection)
Should a short circuit occur, the SCP function switches off the power supply unit and protects the electronics from damage.

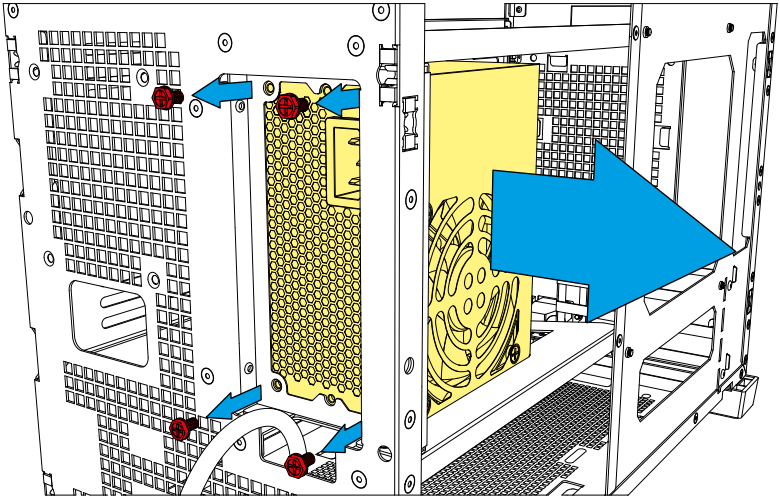
OCP (Over-Current Protection)
If the current measured on a rail exceeds a specified value, the OCP function switches off the power supply unit to prevent damage.

OTP (Over-Temperature Protection)
If the heat level inside the power supply unit reaches a critical point, the OTP function switches off the device to protect the electronics.

Installation

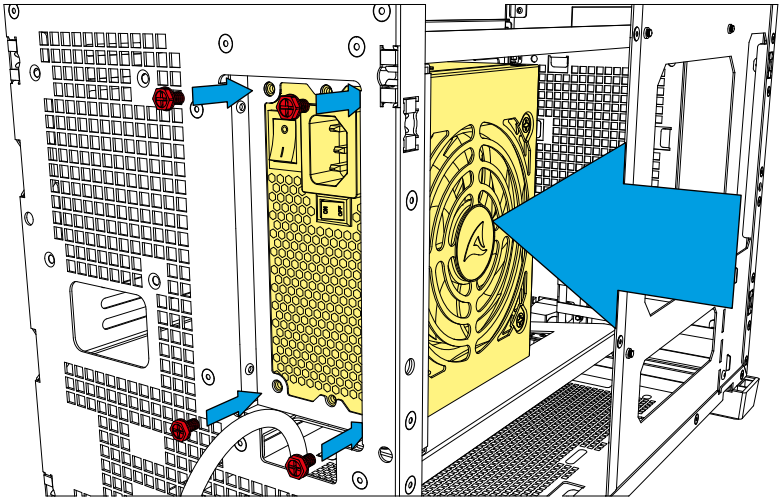
Remove the old power supply unit from the PC case

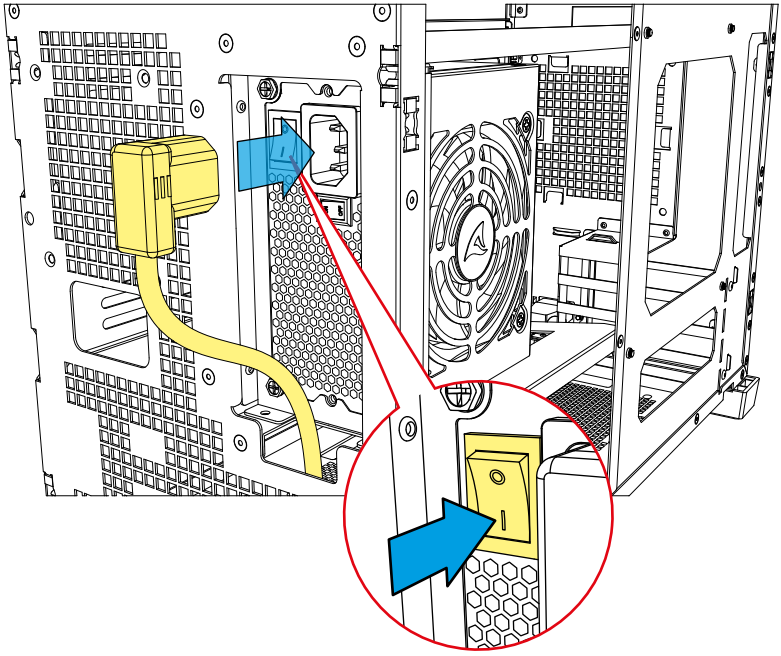




Installation

Install the power supply unit into the PC case

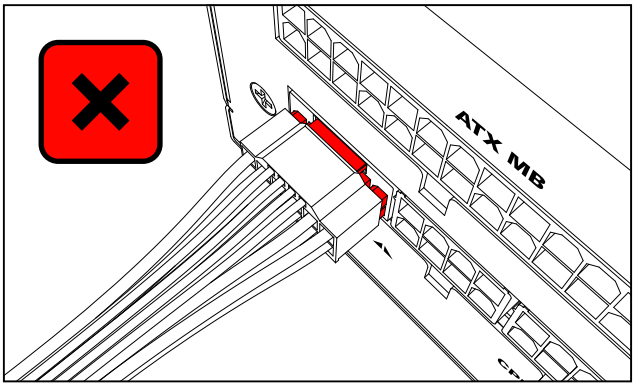


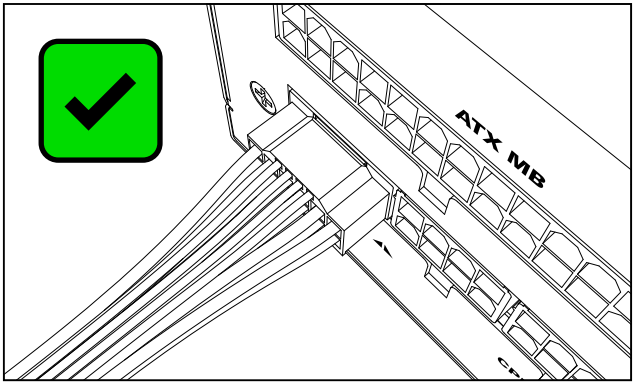


Installation

PLEASE NOTE!

Make sure that only the supplied modular cables are used. The use of other cables (for example, cables from an older Sharkoon PSU series or cables from other manufacturers) can damage the device and the peripheral hardware. Make sure all cables are properly connected and fully inserted into the power supply unit and the peripheral hardware.

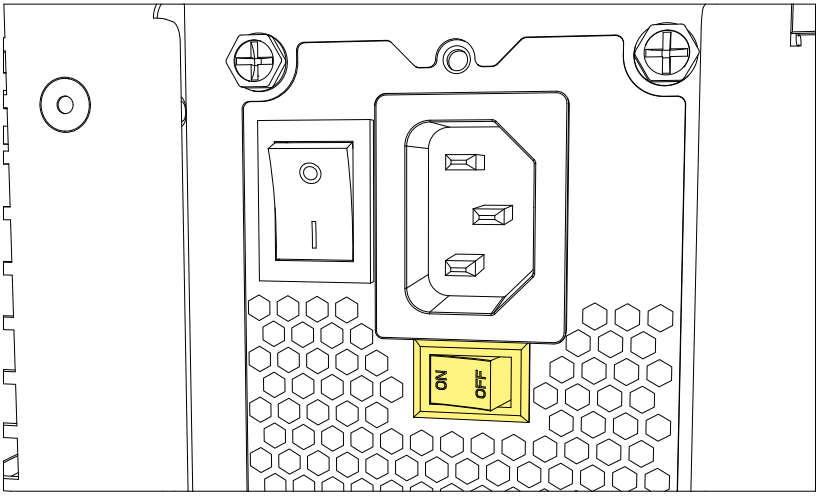




Cooling Options

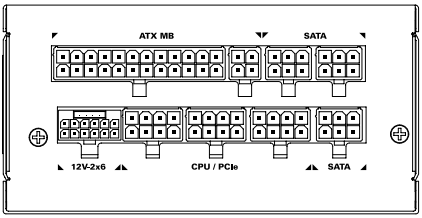
The Rebel P20 SFX is equipped with two functions for flexibly adjusting the cooling behavior, which are explained below.

Zero RPM Mode
When the Zero RPM mode is on, the fan rotation is stopped at low and medium loads to enable silent operation. When the load on the system increases, the fan will automatically turn on again to cool the power supply unit sufficiently. When the Zero RPM mode is off, the fan runs continuously at low speed to produce a constant airflow.



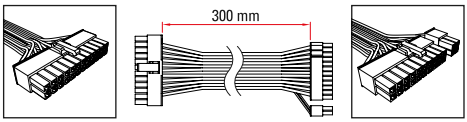
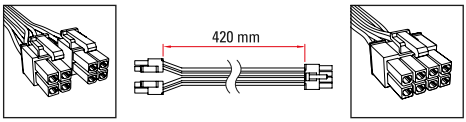
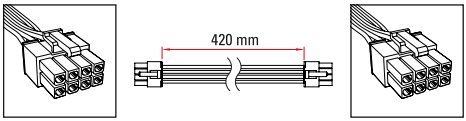
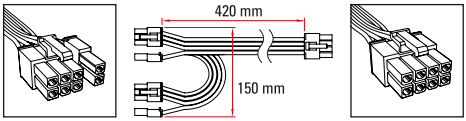
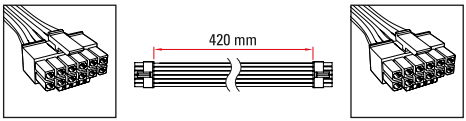
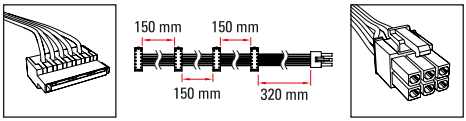
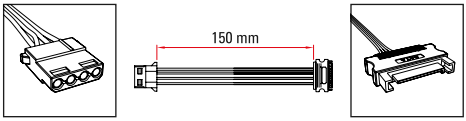
Fan Delay Mode
The power supply unit's fan continues to run for 120 seconds at constant speed after the system has been switched off. As a result, hot spots are avoided, and remaining waste heat is transported out of the system. In addition, this increases the service life of the installed components.

Connection Options



1x 24-pin mainboard (2x ATX MB)
2x 4+4-pin/8-pin CPU (CPU / PCIe)
1x 6+2-pin PCIe (CPU / PCIe)
3x SATA (SATA)
1x 12V-2x6

CABLE SET

QTY	Type	Cable	Connectors per Cable	Total Connectors
1	24-Pin Mainboard Connector		1	1
1	4+4-Pin CPU Connector		1	1
1	8-Pin CPU Connector		1	1
1	6+2-Pin PCIe Connector		2	2
1	12V-2x6 Connector		1	1
2	SATA Connector		4	8
1	IDE Connector		1	1

Troubleshooting

If the power supply unit is not functioning correctly,
check the following points:

1. Is the power cord correctly inserted into your wall outlet and the power supply unit?
2. Make sure the on/off switch is in the “I” position.
3. Check that the 24-pin mainboard connector and the 4+4-pin /8-pin CPU connector are correctly connected to the mainboard.
4. Check if the connectors of the cables are firmly plugged into the ports and headers of the peripheral hardware.
5. Pull the plug of the power cord out of your wall outlet and leave the power supply unit without power for approximately 10 minutes. This will cause a reset of the protective circuits.

If the system still fails to function, please contact
support@sharkoon.com

Note

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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 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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