# intelbras

Intelbras PSR180-12A-B — PSR180-12A-F and PSR180-12D-B

**Power Supply User Manual** 



## **Intelbras PSR180-12A-B - PSR180-12A-F and PSR180-12D-B**Power Supply User Manual



#### **Functions**

The PSR180-12A-F and PSR180-12A-B are AC-input and DC-output power supplies. The PSR180-12D-B is DC-input and DC-output power supply. These power supplies provide an output voltage of 12 V and a maximum output of 180 W. The PSR180-12A-F and PSR180-12A-B are AC-input and DC-output power supplies. The PSR180-12D-B is a DC-input and DC-output power supply. Both the AC power module and the DC power module can convert the input voltage into the 12V voltage required by the powered device, and their maximum output power can reach 180W.

The PSR180-12A-F and PSR180-12A-B AC power supplies are similar in all respects except for the markings and the direction of airflow. The PSR180-12A-F power supply draws in air from the power supply panel, while the PSR180-12A-B and PSR180-12D-B power supplies expel air from the power supply panel. The following pictures show the PSR180-12A-B and PSR180-12D-B power supplies respectively. The PSR180-12A-F and PSR180-12A-B AC power supply modules look similar, only the silk screen and the air duct direction are different. The air duct direction of PSR180-12A-F is air inlet on the power supply panel side; the air duct direction of PSR180-12A-B and PSR180-12D-B is air outlet on the power supply panel side. The following pictures show the appearance of PSR180-12A-B and PSR180-12D-B respectively.

| Protection function           | Protection state                                      | Support for auto-recovery   |
|-------------------------------|---|---|
| Output overvoltage protection | The power module is locked and does not supply power. | No  |
| Short-circuit protection      | The power module does not supply power.               | Automatically restores power supply after the short circuit condition is resolved             |
| Overcurrent protection        | The power module does not supply power.               | Automatically restores power supply after the output current decreases to an acceptable range |
| Overtemperature protection    | The power module does not supply power.               | Automatically restores power supply after the temperature decreases to an acceptable range    |

After a power supply is locked, it cannot restore power supply automatically after the issues are resolved. Follow this procedure to restore the power supply operation:

Disconnect the power cord from the external power supply system.

Disconnect the power cord from the power supply and then reconnect it.

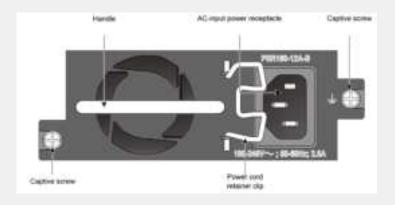
Connect the power cord to the external power supply system.



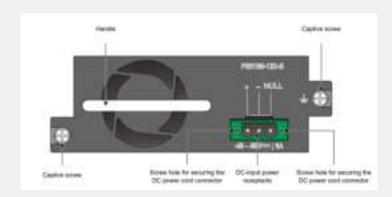
## **Technical specifications**

| ltem                   | Specifications  |
|------------------------|---|
| Rated voltage range    | PSR180-12A-F/PSR180-12A-B: 100 to 240V AC @ 50/60Hz<br>PSR180-12D-B: -48 to -60V DC |
| Max voltage range      | PSR180-12A-F/PSR180-12A-B: 90 to 264V AC @ 47/63Hz<br>PSR180-12D-B: -36 to -72V DC  |
| Output voltage         | 12 V  |
| Max output current     | 15 A  |
| Max output power       | 180 W   |
| Dimensions (H × W × D) | 41.1×101.6×177 mm (1.62 × 4 × 6.97 in)  |
| Operating temperature  | -5°C to 55°C (25°F to 131°F)  |
| Storage temperature    | -40°C to 70°C (–40°F to +158°F)   |

### **Appearance**







### Safety precautions

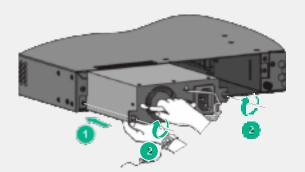
- Wear an ESD wrist strap and make sure the wrist strap makes good skin contact.
- Before installing the power supply, make sure the operating voltage of the external power supply system is as required by the power supply, and the output voltage of the power supply is as required by the powered device.
- To avoid bodily injury, do not touch any bare wire or terminal.
- Never place the power supply in a wet area and prevent fluid from flowing into the power supply.
- To avoid power supply damage, do not open the power supply. When the internal circuits or components of the power supply fail, contact Intelbras Support.
- Before installing or removing the power supply, make sure no power cord is connected to the power supply.

#### **Tools**

• Prepare the following tools for installation and removal: a flat-head screwdriver, a Phillips screwdriver, and an ESD wrist strap.

#### Installing the power supply

- To prevent damage to the power supply or the connector on the backplane of the powered device, insert the power supply gently.
- If you insert the power supply upside down, you will encounter a hard resistance because of the special structure designs of the slot and power supply. You need to pull out the power supply, orient it correctly, and insert it again.
- If the captive screw cannot be tightly fastened, examine the installation of the power supply.





- Unpack the power supply and verify that the input mode of the power supply is as required.
- Remove the filler panel, if any, from the target power supply slot.
- Correctly orient the power supply. Grasping the module handle with one hand and supporting the module bottom with the other, insert the module slowly into the slot along the guide rails.
- Use a Phillips screwdriver to fasten the captive screws on the power supply to secure it in the chassis.

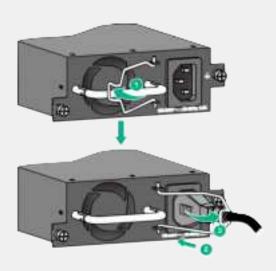
### Removing the power supply

- Disconnect the power cord from the power supply and the external power supply.
- Face the front of the power supply.
- Use a Phillips screwdriver to loosen the captive screws on the power supply until the captive screws are disengaged from the device.
- Grasping the handle of the power supply with one hand, pull it part way out. Then supporting the power module bottom with the other hand, pull the power supply slowly out of the slot along the guide rails
- Put the removed power supply into an antistatic bag.

#### Connecting the power cord

Use an AC power cord to connect an AC power supply to the external AC power supply system.

### Connecting an AC power cord

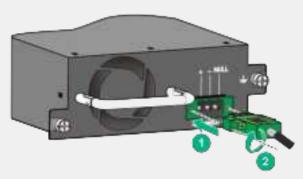


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- Attach the hooks of the power cord retainer clip into the holes on the two sides of the AC-input power receptacle. Skip this step if the power cord retainer clip is installed on the power supply.
- Pull the power cord retainer clip leftward.
- Connect one end of the AC power cord to the AC-input power receptacle.
- Pull the power cord retainer clip rightward to secure the power cord connector in place.
- Connect the other end of the AC power cord to the external AC power supply system.
- The power cord and power cord retainer clip in the figure are for illustration only.

#### Connecting a DC power cord



- The power cord color code scheme in the following figure is for illustration only. The cable delivered for your country or region might use a different color scheme. When you connect the power cord, always identify the polarity symbol on its wires.
- Connect the other ends of the wires for the PSR180-12D-B power supply to a –48 VDC power source, with the negative wire (– or L–) to the negative terminal (–) and the positive wire (+ or M/N) to the positive terminal (+).

Compatible with: SC 5525-48X-6H, SC 5525-24X-6H, SC 3590-28G-4SC-8XE, SC 3590-48G-4XE, SC 3590-28S-4SC-8XE, SC 3590-48G-4XE, SC 3590-28G-4SC-8XE and SC 3590-48GP-6XE.

#### PSR180-12A-B/PSR180-12A-F Box content:

1 x power supply

1 x 2.0 meters Brazil standard (NBR 14136) power cable



#### PSR180-12D-B Box content:

1 x power supply 1 x 2.0 meters DC power cord



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