

# 5 Power Supplies

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## NOTICE

- Do not use power modules of different power values in the same router.
  - A router can use only supported power modules. Using unsupported power modules will bring unexpected risks.
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## 5.1 Overview of Power Modules

### Power Modules for AR500 Series Routers

**Table 5-1** lists the power modules for AR500 series routers.

**Table 5-1 Table 1** Power modules for AR500 series routers

Product Model	Power Module Delivered by Default	Optional Power Module
AR502CG-L	No power module is delivered by default. This model is equipped with an embedded 2-pin DC power terminal.	60 W industrial AC power module
AR502EG-L AR502EG-La AR502EG-Lj AR502EGW-L AR502EGRb-L AR502EGRc-Lc AR502EGRz-Lc AR502EGRz-L AR502G-L-D-H AR502GR-L-D-H	No power module is delivered by default. These models are equipped with an embedded 4-pin DC power terminal (square shape).	<ul style="list-style-type: none"><li>• 24 W integrated power adapter with an adapter cable</li><li>• 60 W industrial AC power module</li></ul>
AR502EG-L-PD	-	-
AR503EDGW-Lc AR503EDGW-Lo	No power module is delivered by default. These models are equipped with an embedded 5-pin M12 DC power terminal.	-
AR503EDGW-Lc3 AR503EQGW-L AR503EW AR503GW-LM7 AR503GW-LcM7 AR503GW-Lo AR503HGW-L AR503HGW-Lc	No power module is delivered by default. These models are equipped with an embedded 4-pin M12 DC power terminal.	-
AR509CG-Lc AR509CG-Lt AR509CG-Lt-7 AR509CGW-L	No power module is delivered by default. These models are equipped with an embedded 4-pin DC power terminal (square shape).	<ul style="list-style-type: none"><li>• 24 W integrated power adapter with an adapter cable</li><li>• 60 W industrial AC power module</li></ul>

Product Model	Power Module Delivered by Default	Optional Power Module
AR509G-L-D-H AR509G-Lc AR509GW-L-D-H	No power module is delivered by default. These models are equipped with an embedded 4-pin DC power terminal (circular shape).	<ul style="list-style-type: none"><li>• 24 W integrated power adapter with an adapter cable</li><li>• 60 W industrial AC power module</li><li>• 100 W PoE power adapter</li></ul>

## Power Modules for AR510 Series Routers

[Table 5-2](#) lists the power modules for AR510 series routers.

**Table 5-2 Table 2** Power modules for AR510 series routers

Product Model	Power Module Delivered by Default	Optional Power Module
AR511GW-LAV2M3 AR511CGW-LAV2M3 AR511GW-LM7 AR511GW-L-B3 AR511EGW-LcAV2 AR515GW-LM9-D AR515CGW-L	No power module is delivered by default. These models are equipped with an embedded 4-pin DC power terminal (circular shape).	-
AR513W-V3M8 AR513GW-LcV1 AR513W-V1	No power module is delivered by default. These models are equipped with an embedded 4-pin DC power terminal (square shape).	

## Power Modules for AR530 Series Routers

[Table 5-3](#) lists the power modules for AR530 series routers.

**Table 5-3 Table 3** Power modules for AR530 series routers

Product Model	Power Module Delivered by Default	Optional Power Module
AR531-2C-H AR531-F2C-H AR531GPe-U-H AR531GR-U-H	No power module is delivered by default. These models are equipped with an embedded 4-pin AC power terminal.	180 W PoE midspan
AR531G-U-D-H	No power module is delivered by default. This model is equipped with an embedded 2-pin DC power terminal.	<ul style="list-style-type: none"> <li>60 W industrial AC power module</li> <li>180 W PoE midspan</li> </ul>

## Power Modules for AR550 Series Routers

**Table 5-4** lists the power modules for AR550 series routers.

**Table 5-4 Table 4** Power modules for AR550 series routers

Product Model	Power Module Delivered by Default	Optional Power Module
AR550-8FE-D-H AR550-24FE-D-H	No power module is delivered by default. This model is equipped with an embedded 2-pin DC power terminal.	<ul style="list-style-type: none"> <li>60 W industrial AC power module</li> <li>180 W PoE midspan</li> </ul>
AR550C-4GE AR550C-2C6GE AR550E	No power module is delivered by default. These models are equipped with an embedded 2-pin DC power terminal.	<ul style="list-style-type: none"> <li>60 W industrial AC power module</li> <li>240 W AC PoE power module</li> </ul>
AR550C-2C6GE-2D	No power module is delivered by default. This model is equipped with an embedded 2-pin DC power terminal.	240 W AC PoE power module

## Power Modules for AR1500 Series Routers

**Table 5-5** lists the power modules for AR1500 series routers.

**Table 5-5 Table 5** Power modules for AR1500 series routers

Product Model	Power Module Delivered by Default	Optional Power Module
AR1504-8S16T AR1504-16S8T AR1504-24S AR1504-24T	No power module is delivered by default. These models are equipped with an embedded 3-pin AC/DC power terminal.	-

## Power Modules for AR2500 Series Routers

**Table 5-6** lists the power modules for AR2500 series routers.

**Table 5-6 Table 6** Power modules for AR2500 series routers

Product Model	Power Module Delivered by Default	Optional Power Module
AR2504-H AR2504E-H	No power module is delivered by default. These models are equipped with an embedded 3-pin AC/DC power terminal.	60 W AC power module
AR2504-D-H	No power module is delivered by default. This model is equipped with an embedded 3-pin AC/DC power terminal.	60 W DC power module

## 5.2 Types of Power Supplies (Industry)

**Table 5-7** describes the types of power supplies supported by AR series routers. The actual power supplies applicable to a router vary depending on the product model.

**Table 5-7** Types of power supplies

Power Module Type	Description
Built-in power module	It is fixed in the chassis with a power socket on the panel, and connects to an external power source through a power cable to supply power for the router.
Power adapter	It is an external unit used to connect a router to an external power source.

Power Module Type	Description
PoE power adapter	It is an external unit used to connect a router to an external power source. Using the PoE power adapter, the router can supply power to attached powered devices.
AC power module	It is an external unit used to connect a router to an external power source through a power cable.
DC or AC-DC power module	It is installed in a power slot of a router and connects to an external power source through a power cable to supply power for the router.
AC PoE power module	It is an external unit used to connect a router to an external power source through a power cable to supply power for its attached powered devices.
PoE midspan	It is an external unit used to connect a router to an external power source through a power cable to supply power for the router and its attached powered devices. In addition, it can be used to convert an Ethernet interface that does not support PoE into a PoE-enabled GE interface.

## 5.3 100 W PoE Power Adapter

### Product Support

**Table 5-8** lists the device models that support a 100 W PoE power adapter.

**Table 5-8** Product support

Power Module Name	Product Support
100 W PoE Power Adapter	<a href="#">AR509G-Lc</a> <a href="#">AR509G-L-D-H</a> <a href="#">AR509GW-L-D-H</a>

### Appearance

**Figure 5-1** shows the appearance of a 100 W PoE power adapter.

**Figure 5-1** 100 W PoE power adapter

## Function

**Table 5-9** describes functions of a 100 W PoE power adapter.

**Table 5-9** Function description

Function	Description
Input undervoltage protection	The power adapter can automatically resume power supply from this protection state.
Output overvoltage protection	The power adapter can automatically resume power supply from this protection state.
Output current limiting protection	The power adapter can automatically resume power supply from this protection state.
Output short-circuit protection	The power adapter can automatically resume power supply from this protection state.
Overtemperature protection	When the temperature of the power adapter exceeds a specified threshold, the power adapter stops supplying power. When the temperature falls into the normal range, the power adapter automatically resumes power supply.

## Technical Specifications

**Table 5-10** lists the technical specifications of a 100 W PoE power adapter.

**Table 5-10** Technical specifications

Item	Specification
Dimensions (H x W x D)	40 mm x 72 mm x 171 mm (1.57 in. x 2.83 in. x 6.73 in.)
Weight	0.65 kg (1.43 lb)

Item	Specification
Input	Rated input voltage range: 100 V AC to 240 V AC, 50 Hz/60 Hz Maximum input voltage range: 90 V AC to 264 V AC, 47 Hz to 63 Hz Maximum input current: 2 A
Output	Rated output voltage: 48 V DC Maximum output voltage range: 45.6 V DC to 50.4 V DC Maximum output power: 100 W Maximum output current: 2.08 A

## Ordering Information

To place an order, visit <https://e.huawei.com/en/how-to-buy> to find the local supplier or submit your inquiries online.

**Table 5-11** provides the 100 W PoE power adapter ordering information.

**Table 5-11** Ordering information

Part Number	Model	Description
02220119	AR0MPSAP1000	100 W AC-DC Power Adapter

## 5.4 24 W Integrated Power Adapter

### Product Support

**Table 5-12** lists the device models that support a 24 W integrated power adapter.

**Table 5-12** Product support

Module Name	Product Support
24 W integrated power adapter	<a href="#">AR509G-Lc</a> <a href="#">AR509G-L-D-H</a> <a href="#">AR509GW-L-D-H</a>

### Appearance

**Figure 5-2** shows the appearance of a 24 W integrated power adapter.



**Figure 5-2** 24 W integrated power adapter

## Function

**Table 5-13** describes functions of a 24 W integrated power adapter.

**Table 5-13** Function description

Function	Description
Input overcurrent protection	In this protection state, the power adapter stops supplying power and cannot automatically resume power supply when the input current restores to the normal range.
Output current limiting protection	In this protection state, the power adapter supplies power intermittently. When the output current is limited within a range, the power adapter automatically resumes power supply.
Output overvoltage protection	In this protection state, the power adapter stops supplying power intermittently. When the output voltage restores to the normal range, the power adapter automatically resumes power supply.
Output short-circuit protection	In this protection state, the power adapter supplies power intermittently. When the short circuit is removed, the power adapter automatically resumes power supply.
Heat dissipation	The power adapter does not have built-in fans and uses nature heat dissipation.

## Technical Specifications

**Table 5-14** lists technical specifications of a 24 W integrated power adapter.

**Table 5-14** Technical specifications

Item	Specification
Physical specifications	<ul style="list-style-type: none"><li>• Dimensions (H x W x D): 28 mm x 51 mm x 86 mm (1.10 in. x 2.01 in. x 3.39 in.)</li><li>• Weight: 0.15 kg (0.33 lb)</li></ul>

Item	Specification
Environment parameter	Operating temperature: -5°C to +45°C (23°F to +113°F)
Input	Rated input voltage range: 100 V AC to 240 V AC, 50 Hz/60 Hz Maximum input voltage range: 90 V AC to 264 V AC, 47 Hz to 63 Hz Maximum input current: 0.8 A
Output	Rated output voltage: 12 V DC Maximum output voltage range: 11.4 V DC to 12.6 V DC Maximum output power: 24 W Maximum output current: 2 A

## Ordering Information

To place an order, visit <https://e.huawei.com/en/how-to-buy> to find the local supplier or submit your inquiries online.

**Table 5-15** provides the 24 W integrated power adapter ordering information.

**Table 5-15** Ordering information

Part Number	Model	Name Label (Silkscreen)	Description
02220362	-	-	24 W integrated power adapter-China Standard
02220363	-	-	24 W integrated power adapter-Europe Standard
02220364	-	-	24 W integrated power adapter-UK Standard
02220365	-	-	24 W integrated power adapter-US Standard
02220366	-	-	24 W integrated power adapter-Australia Standard

## 5.5 24 W Integrated Power Adapter with an Adapter Cable

Product Support

Table 5-16 lists the device models that support a 24 W integrated power adapter with an adapter cable.

Table 5-16 Product support

Module Name	Product Support
24 W integrated power adapter with an adapter cable	AR502EG-L AR502EG-La AR502EG-Lj AR502EGRb-L AR502EGRc-Lc AR502EGRz-L AR502EGRz-Lc AR502EGW-L AR502G-L-D-H AR502GR-L-D-H AR509CG-Lc AR509CG-Lt AR509CGW-L

Appearance

Figure 5-3 shows the appearance of a 24 W integrated power adapter with an adapter cable.

**Figure 5-3** Appearance of a 24 W integrated power adapter with an adapter cable

## Function

**Table 5-17** describes functions of a 24 W integrated power adapter with an adapter cable.

**Table 5-17** Function description

Function	Description
Input overcurrent protection	In this protection state, the power adapter stops supplying power and cannot automatically resume power supply when the input current restores to the normal range.
Output current limiting protection	In this protection state, the power adapter supplies power intermittently. When the output current is limited within a range, the power adapter automatically resumes power supply.
Output overvoltage protection	In this protection state, the power adapter stops supplying power intermittently. When the output voltage restores to the normal range, the power adapter automatically resumes power supply.
Output short-circuit protection	In this protection state, the power adapter supplies power intermittently. When the short circuit is removed, the power adapter automatically resumes power supply.

Function	Description
Heat dissipation	The power adapter does not have built-in fans and uses nature heat dissipation.

## Technical Specifications

**Table 5-18** lists technical specifications of a 24 W integrated power adapter with an adapter cable.

**Table 5-18** Technical specifications

Item	Specification
Physical specifications	<ul style="list-style-type: none"><li>Dimensions (H x W x D): 28 mm x 51 mm x 86 mm (1.10 in. x 2.01 in. x 3.39 in.)</li><li>Weight: 0.15 kg (0.33 lb)</li></ul>
Environment parameter	Operating temperature: -5°C to +45°C (23°F to +113°F)
Input	Rated input voltage range: 100 V AC to 240 V AC, 50 Hz/60 Hz Maximum input voltage range: 90 V AC to 264 V AC, 47 Hz to 63 Hz Maximum input current: 0.8 A
Output	Rated output voltage: 12 V DC Maximum output voltage range: 11.4 V DC to 12.6 V DC Maximum output power: 24 W Maximum output current: 2 A

## Ordering Information

To place an order, visit <https://e.huawei.com/en/how-to-buy> to find the local supplier or submit your inquiries online.

**Table 5-19** provides ordering information about a 24 W integrated power adapter with an adapter cable.

**Table 5-19** Ordering information

Part Number	Model	Name Label (Silkscreen)	Description
02311RMJ	AR24WAPCN	AR24WAPCN	24 W integrated power adapter with an adapter cable-China Standard

Part Number	Model	Name Label (Silkscreen)	Description
02311RML	AR24WAPEU	AR24WAPEU	24 W integrated power adapter with an adapter cable-Europe Standard
02311RMM	AR24WAPAU	AR24WAPAU	24 W integrated power adapter with an adapter cable-Australia Standard
02311RMN	AR24WAPUK	AR24WAPUK	24 W integrated power adapter with an adapter cable-UK Standard
02311RMP	AR24WAPUK	AR24WAPUK	24 W integrated power adapter with an adapter cable-US Standard

## 5.6 60 W Industrial AC Power Module

### Product Support

**Table 5-20** lists the device models that support a 60 W industrial AC power module.

Table 5-20 Product support

Module Name	Product Support
60 W industrial AC power module	AR502CG-L AR502EG-L AR502EG-La AR502EG-Lj AR502EGRb-L AR502EGRc-Lc AR502EGRz-L AR502EGRz-Lc AR502EGW-L AR502G-L-D-H AR502GR-L-D-H AR509CG-Lc AR509CG-Lt AR509CGW-L AR509G-Lc AR509G-L-D-H AR509GW-L-D-H AR531G-U-D-H AR550-24FE-D-H AR550-8FE-D-H AR550C-2C6GE AR550C-4GE AR550E

Appearance

Figure 5-4 shows the appearance of a 60 W industrial AC power module.

Figure 5-4 60 W industrial AC power module



Function

Table 5-21 describes functions of a 60 W industrial AC power module.

Table 5-21 Function description

Function	Description
Input undervoltage protection	The power module can automatically resume power supply from this protection state.
Input overcurrent protection	The power module cannot automatically resume power supply from this protection state.
Output overvoltage protection	The power module can automatically resume power supply from this protection state.
Output current limiting protection	The power module can automatically resume power supply from this protection state.



Function	Description
Output short-circuit protection	The power module can automatically resume power supply from this protection state.
Overtemperature protection	When the temperature of the power module exceeds a specified threshold, the power module stops supplying power. When the temperature falls into the normal range, the power module automatically resumes power supply.
Hot swap	Supported

## Panel

[Figure 5-5](#) shows the panel of a 60 W industrial AC power module.

Figure 5-5 Panel of a 60 W industrial AC power module

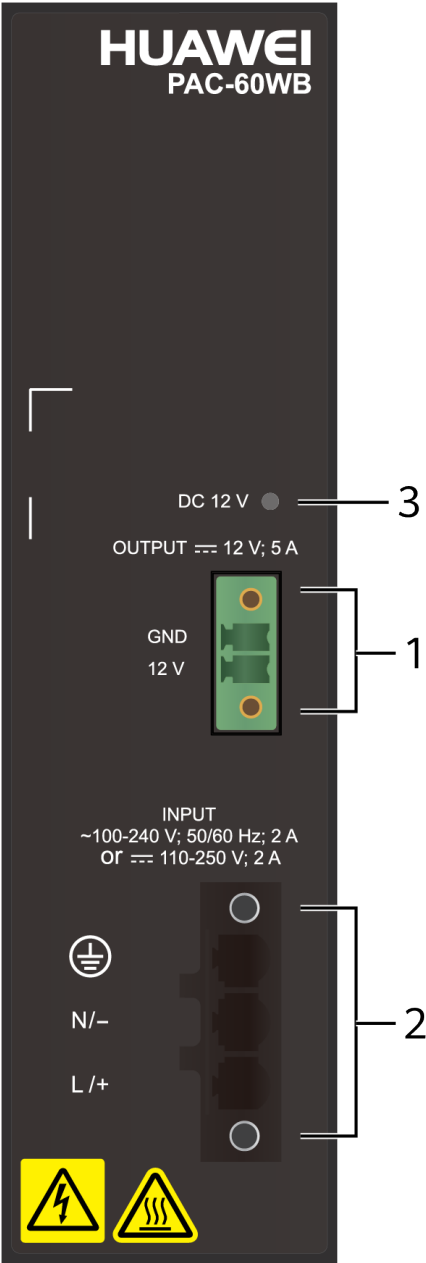


Table 5-22 Components on the panel

Number	Name	Description
1	2-pin DC output power socket	Connect the power cable to the router using a power cable with a 2-pin plug.
2	AC/DC input power socket	Connect the power adapter to an external power supply system using a power cable with a 3-pin plug.

Number	Name	Description
3	DC 12 V	<ul style="list-style-type: none"><li>• Steady on: The power output is normal.</li><li>• Off: The power output is abnormal.</li><li>• Blinking: The power module is in hiccup protection state.</li></ul>

## Technical Specifications

**Table 5-23** lists technical specifications of a 60 W industrial AC power module.

**Table 5-23** Technical specifications

Item	Specification
Physical parameter	<ul style="list-style-type: none"><li>• Dimensions (H x W x D): 40 mm x 133 mm x 150 mm (1.57 in. x 5.24 in. x 5.91 in.)</li><li>• Weight: 0.9 kg (2.0 lb)</li></ul>
Environment parameter	<ul style="list-style-type: none"><li>• Storage temperature: -40°C to +85°C (-40°F to +185°F)</li><li>• Operating temperature: -40°C to +70°C (-40°F to +158°F)</li><li>• Operating relative humidity: 5% to 95%, noncondensing</li></ul>
Input	Rated input voltage range: <ul style="list-style-type: none"><li>• AC: 100 V to 240 V; 50/60 Hz; 2 A</li><li>• DC: 110 V to 250 V; 2 A</li></ul> Maximum input voltage range: <ul style="list-style-type: none"><li>• AC: 90 V to 264 V</li><li>• DC: 88 V to 300 V</li></ul>
Output	Rated output voltage: 12 V DC Rated output current: 5 A

## Ordering Information

To place an order, visit <https://e.huawei.com/en/how-to-buy> to find the local supplier or submit your inquiries online.

**Table 5-24** provides 60 W industrial AC power module ordering information.

**Table 5-24** Ordering information

Part Number	Model	Name Label (Silkscreen)	Description
02311CRR	PAC-60WB	PAC-60WB	60W AC Power Module

## 5.7 60 W DC Power Module

### Product Support

**Table 5-25** lists the device models that support a 60 W DC power module.

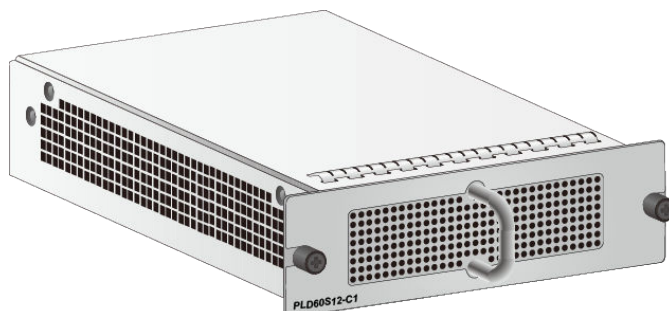
**Table 5-25** Product support

Module Name	Product Support
60 W DC power module	<a href="#">AR2504-D-H</a>

### Appearance

**Figure 5-6** shows the appearance of a 60 W DC power module.

**Figure 5-6** 60 W DC power module



### Function

**Table 5-26** describes functions of a 60 W DC power module.

**Table 5-26** Function description

Function	Description
Input undervoltage protection	The power module can automatically resume power supply from this protection state.
Input overcurrent protection	The power module cannot automatically resume power supply from this protection state.
Output overvoltage protection	The power module can automatically resume power supply from this protection state.

Function	Description
Output current limiting protection	The power module can automatically resume power supply from this protection state.
Output short-circuit protection	The power module can automatically resume power supply from this protection state.
Overtemperature protection	When the temperature of the power module exceeds a specified threshold, the power module stops supplying power. When the temperature falls into the normal range, the power module automatically resumes power supply.
Hot swap	Supported

## Technical Specifications

**Table 5-27** lists technical specifications of a 60 W DC power module.

**Table 5-27** Technical specifications

Item	Specification
Physical parameter	<ul style="list-style-type: none"><li>• Dimensions (H x W x D): 40.2 mm x 139.5 mm x 223.0 mm (1.58 in. x 5.49 in. x 8.78 in.)</li><li>• Weight: 0.95 kg (2.09 lb)</li></ul>
Power input	<ul style="list-style-type: none"><li>• Rated input voltage range: 24 V DC to 48 V DC</li><li>• Maximum input voltage range: 18 V DC to 60 V DC</li><li>• Maximum input current: 4 A</li></ul>
Power output	<ul style="list-style-type: none"><li>• Rated output voltage: 12 V DC</li><li>• Output voltage range: 11.93 V DC to 12.66 V DC</li><li>• Maximum output power: 60 W</li></ul>

## Ordering Information

To place an order, visit <https://e.huawei.com/en/how-to-buy> to find the local supplier or submit your inquiries online.

**Table 5-28** provides 60 W DC power module ordering information.

**Table 5-28** Ordering information

Part Number	Model	Name Label (Silkscreen)	Description
02311RFU	PLD60S12-C1	PLD60S12-C1	60W 24/48V DC power module

## 5.8 60 W AC power module

### Product Support

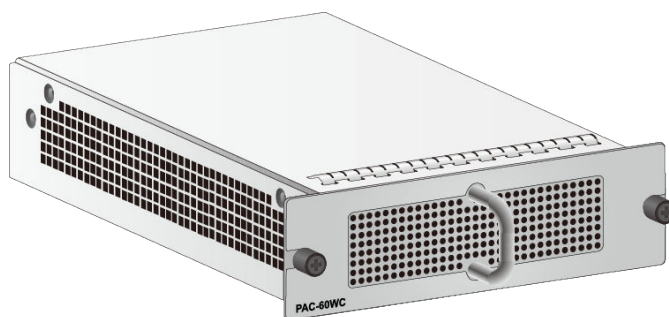
**Table 5-29** lists the device models that support a 60 W AC power module.

**Table 5-29** Product support

Module Name	Product Support
60 W AC power module	<a href="#">AR2504E-H</a> <a href="#">AR2504-H</a>

### Appearance

**Figure 5-7** shows the appearance of a 60 W AC power module.

**Figure 5-7** 60 W AC power module

### Function

**Table 5-30** describes functions of a 60 W AC power module.

**Table 5-30** Function description

Function	Description
Input undervoltage protection	The power module can automatically resume power supply from this protection state.
Input overvoltage protection	The power module can automatically resume power supply from this protection state.
Input overcurrent protection	The power module cannot automatically resume power supply from this protection state.
Output overvoltage protection	The power module cannot automatically resume power supply from this protection state.
Output current limiting protection	The power module cannot automatically resume power supply from this protection state.
Output short-circuit protection	The power module can automatically resume power supply from this protection state.
Overtemperature protection	When the temperature of the power module exceeds a specified threshold, the power module stops supplying power. When the temperature falls into the normal range, the power module automatically resumes power supply.
Hot swap	Supported

## Technical Specifications

**Table 5-31** lists technical specifications of a 60 W AC power module.

**Table 5-31** Technical specifications

Item	Specification
Outline dimensions (H x W x D)	39.5 mm x 140.2 mm x 223.0 mm (1.56 in. x 5.52 in. x 8.78 in.)
Input	Rated input voltage range: <ul style="list-style-type: none"><li>• DC power: 110 V to 250 V</li><li>• AC power: 100 V to 240 V</li></ul> Maximum input voltage range: <ul style="list-style-type: none"><li>• DC power: 88 V to 300 V</li><li>• AC power: 90 V to 264 V</li></ul> Maximum input current: 2 A

Item	Specification
Output	<ul style="list-style-type: none"><li>Rated output voltage: 12 V DC</li><li>Output voltage range: 11.64 V DC to 12.36 V DC</li><li>Maximum output power: 60 W</li></ul>

## Ordering Information

To place an order, visit <https://e.huawei.com/en/how-to-buy> to find the local supplier or submit your inquiries online.

**Table 5-32** provides 60 W AC power module ordering information.

**Table 5-32** Ordering information

Part Number	Model	Name Label (Silkscreen)	Description
02311EVX	PAC60S12-ON	PAC-60WC	60W AC & 110/220V DC Power Module

## 5.9 180 W PoE Midspan

### Product Support

**Table 5-33** lists the device models that support a 180 W PoE midspan.

**Table 5-33** Product support

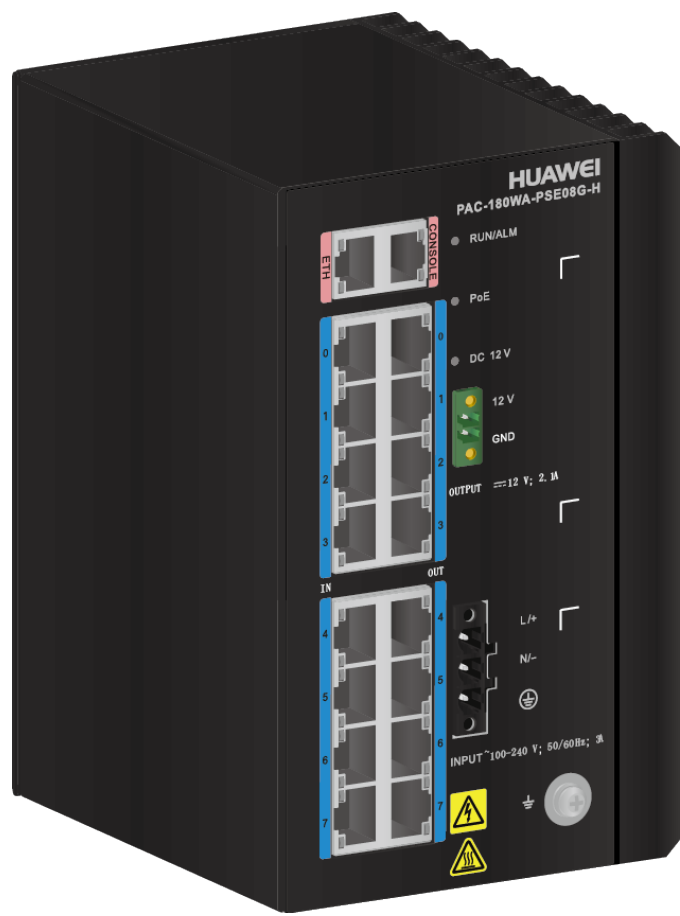
Module Name	Product Support
180 W PoE midspan	<a href="#">AR531-2C-H</a> <a href="#">AR531-F2C-H</a> <a href="#">AR531GPe-U-H</a> <a href="#">AR531GR-U-H</a> <a href="#">AR531G-U-D-H</a> <a href="#">AR550-8FE-D-H</a> <a href="#">AR550-24FE-D-H</a>

### Appearance

**Figure 5-8** shows the appearance of a 180 W PoE midspan.



Figure 5-8 180 W PoE midspan



Function

Table 5-34 describes functions of a 180 W PoE midspan.

Table 5-34 Function description

Function	Description
Input undervoltage protection	The power module can automatically resume power supply from this protection state.
Input overcurrent protection	The power module can automatically resume power supply from this protection state.
Output overvoltage protection	The power module can automatically resume power supply from this protection state.
Output current limiting protection	The power module can automatically resume power supply from this protection state.
Output short-circuit protection	The power module can automatically resume power supply from this protection state.

Function	Description
Overtemperature protection	When the temperature of the power module exceeds a specified threshold, the power module stops supplying power. When the temperature falls into the normal range, the power module automatically resumes power supply.
Hot swap	Supported

Panel

Figure 5-9 shows the panel of a 180 W PoE midspan.

Figure 5-9 Panel of a 180 W PoE midspan

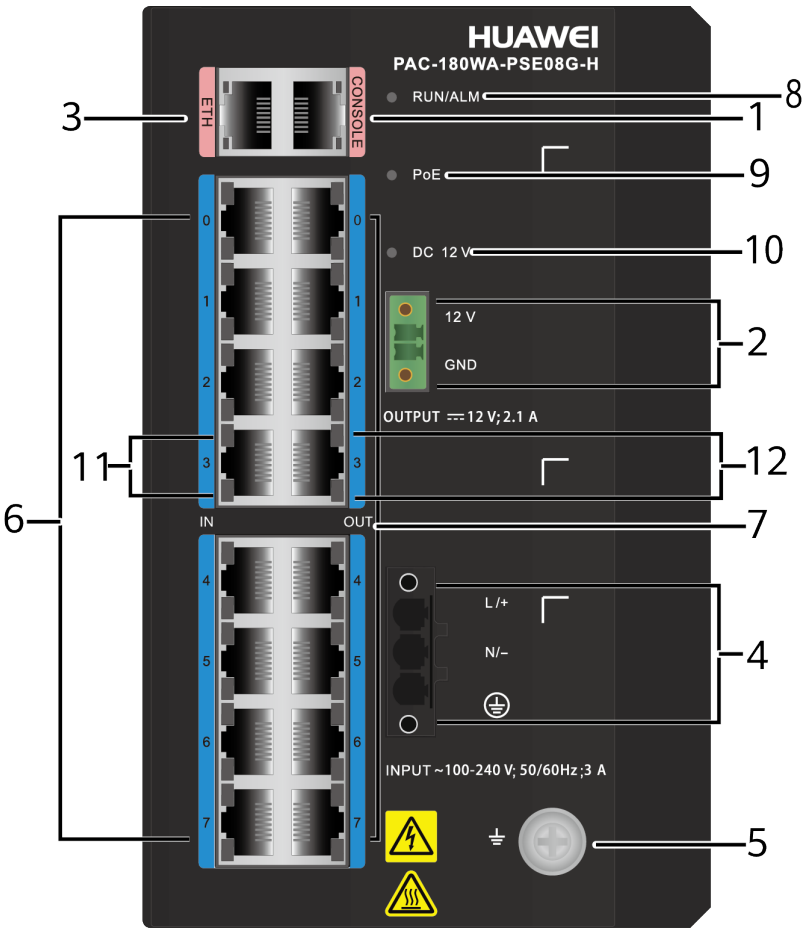


Table 5-35 Components on the panel

Number	Name	Description
1	Console interface	Uses a <a href="#">7.3.1 Console Cable</a> to connect to the console for power commissioning.

Number	Name	Description
2	2-pin DC output power socket	Connects the power module to a router using a power cable with a 2-pin plug.
3	Management FE interface	Reserved hardware interfaces.
4	AC input power socket	Connects the power module to an external power supply system using a power cable with a 3-pin plug.
5	Equipotential ground terminal	Uses a <a href="#">7.5.1 Ground Cable</a> to reliably ground a router to protect the router from lightning and interference.
6	LAN interfaces: eight input GE interfaces	Uses an <a href="#">7.4.1 Ethernet Cable</a> to connect to the Ethernet interface of the router.
7	LAN interfaces: eight output GE interfaces (PoE capable)	<p>Connect to other devices for PoE.</p> <p><b>NOTE</b></p> <p>An Ethernet interface that does not support PoE can be converted into a PoE-enabled GE interface through a 180 W PoE midspan. To implement PoE, connect the output and input GE interfaces to the corresponding interfaces, for example, connecting the input GE interface to the GE0 interface on the left and the output GE interface to the GE0 interface on the right.</p>
8	RUN/ALM	<ul style="list-style-type: none"><li>● Off: The system software is not running or is resetting.</li><li>● Slow blinking green: The system is running properly.</li><li>● Fast blinking green: The system is powering on or restarting.</li></ul>
		Steady red: A system fault has occurred and requires manual intervention.
9	PoE	<ul style="list-style-type: none"><li>● Steady on: The midspan is providing 48 V power supply normally.</li><li>● Off: The midspan does not provide 48 V power supply normally or is not connected to any power source.</li></ul>
10	12 V	<ul style="list-style-type: none"><li>● Steady on: The power input socket of the midspan is receiving power normally from a power source.</li><li>● Off: The midspan cannot be powered by the power source or is not connected to any power source.</li></ul>

Number	Name	Description
11 and 12	GE electrical interface indicators <ul style="list-style-type: none"><li>11: input interface indicator</li><li>12: output interface indicator</li></ul>	<ul style="list-style-type: none"><li>Steady green: The power supply level for PDs is 0 to 3.</li><li>Off: The interface is not supplying power to PDs.</li></ul>
		<ul style="list-style-type: none"><li>Steady orange: The power supply level for PDs is 4.</li><li>Off: The interface is not supplying power to PDs.</li></ul>

## Technical Specifications

**Table 5-36** lists technical specifications of a 180 W PoE midspan.

**Table 5-36** Technical specifications

Item	Specification
Physical parameter	<ul style="list-style-type: none"><li>Dimensions (H x W x D): 111 mm x 180 mm x 133 mm (4.37 in. x 7.09 in. x 5.24 in.)</li><li>Weight: 2.92 kg (6.44 lb)</li></ul>
Environment parameter	Operating relative humidity: 5% to 95%, noncondensing
Input	<ul style="list-style-type: none"><li>Rated voltage range: 100 V AC to 240 V AC, 50/60 Hz</li><li>Maximum voltage range: 90 V AC to 264 V AC, 47 Hz to 63 Hz</li><li>Input current: 3 A</li></ul>
Output	<ul style="list-style-type: none"><li>Rated output voltage: 12 V DC</li><li>Output voltage range: 11.64 V DC to 12.36 V DC</li><li>Output power: 25.2 W</li></ul> <b>NOTE</b> The rated output voltage, output voltage range, and output power are output specifications of the 2-pin DC power supply.
PoE interface standards compliance	802.3af on eight interfaces (a maximum of 15.4 W power), four of which support 802.3at (a maximum of 30 W power) at the same time

## Ordering Information

To place an order, visit <https://e.huawei.com/en/how-to-buy> to find the local supplier or submit your inquiries online.

**Table 5-37** provides 180 W PoE midspan ordering information.

**Table 5-37** Ordering information

Part Number	Model	Name Label (Silkscreen)	Description
02350EJC	PAC-PSE08G-H	PAC-180WA-PSE08G-H	180 W PoE midspan

## 5.10 240 W AC PoE Power Module

### Product Support

**Table 5-38** lists the device models that support a 240 W AC PoE power module.

**Table 5-38** Product support

Module Name	Product Support
240 W AC PoE power module	<a href="#">AR550C-2C6GE</a> <a href="#">AR550C-2C6GE-2D</a> <a href="#">AR550C-4GE</a> <a href="#">AR550E</a>

### Appearance

**Figure 5-10** shows the appearance of a 240 W AC PoE power module.

Figure 5-10 240 W AC PoE power module



Function

Table 5-39 describes functions of a 240 W AC PoE power module.

Table 5-39 Function description

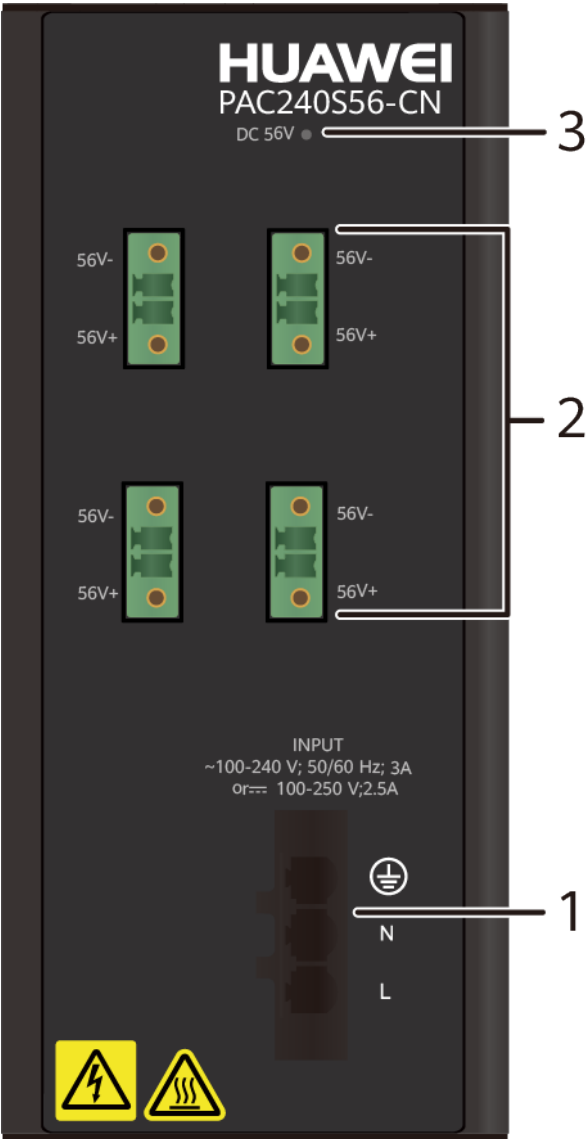
Function	Description
Input undervoltage protection	The power module can automatically resume power supply from this protection state.
Input overvoltage protection	The power module can automatically resume power supply from this protection state.
Output overvoltage protection	The power module can automatically resume power supply from this protection state.

Function	Description
Output current limiting protection	The power module can automatically resume power supply from this protection state.
Output short-circuit protection	The power module can automatically resume power supply from this protection state.
Overtemperature protection	When the temperature of the power module exceeds a specified threshold, the power module stops supplying power. When the temperature falls into the normal range, the power module automatically resumes power supply.

Panel

Figure 5-11 shows the panel of a 240 W AC PoE power module.

Figure 5-11 Panel of a 240 W AC PoE power module



**Table 5-40** Components on the panel

Number	Name	Description
1	3-pin AC/DC input power socket	Connect the power adapter to an external power supply system using a power cable with a 3-pin plug.
2	Four 2-pin DC output power sockets	Connect the power cable to the router using a power cable with a 2-pin plug.
3	Output indicator (DC 56 V)	<ul style="list-style-type: none"><li>Steady on: The power supply is normal.</li><li>Blinking green: The power module is in the output overvoltage or overcurrent protection state.</li><li>Off: The power output is abnormal or the power module is faulty.</li></ul>

## Technical Specifications

**Table 5-41** lists technical specifications of a 240 W AC PoE power module.

**Table 5-41** Technical specifications

Item	Specification
Physical parameter	<ul style="list-style-type: none"><li>Dimensions (H x W x D): 60 mm x 133 mm x 150 mm (2.36 in. x 5.24 in. x 5.91 in.)</li><li>Weight: 1.47 kg (3.24 lb)</li></ul>
Input	<ul style="list-style-type: none"><li>AC power input: 100 V AC to 240 V AC, 50/60 Hz</li><li>AC input current: 3 A</li><li>DC power input: 100 V DC to 250 V DC</li><li>DC input current: 2 A</li></ul>
Output	Output voltage range: 54 V DC to 57 V DC Output power: 240 W

## Ordering Information

To place an order, visit <https://e.huawei.com/en/how-to-buy> to find the local supplier or submit your inquiries online.

**Table 5-42** provides 240 W AC PoE power module ordering information.



Table 5-42 Ordering information

Part Number	Model	Name Label (Silkscreen)	Description
02131265	PAC240S56-CN	PAC240S56-CN	AC-DC Power,-40degC,70degC, 90V,290V,56V/4.29A