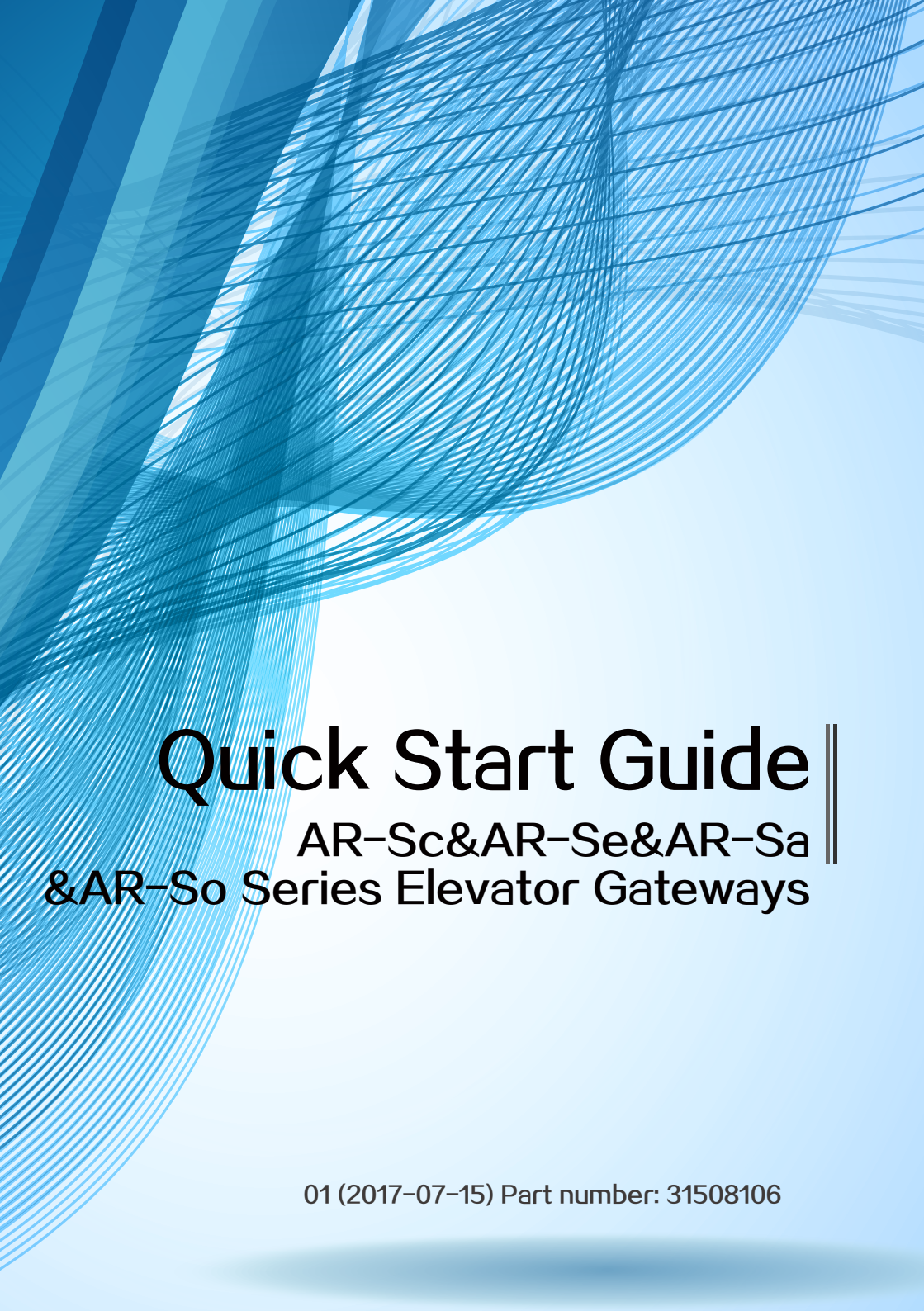




# Quick Start Guide ||

AR-Sc&AR-Se&AR-Sa  
&AR-So Series Elevator Gateways ||

01 (2017-07-15) Part number: 31508106



# Packing List

■ Router (1, with product model on the nameplate)

■ Installation accessories:

LTE remote antenna (1)

Quick Start Guide (1)



**Note** The types and quantities of items in the installation accessory package vary depending on the router configuration.

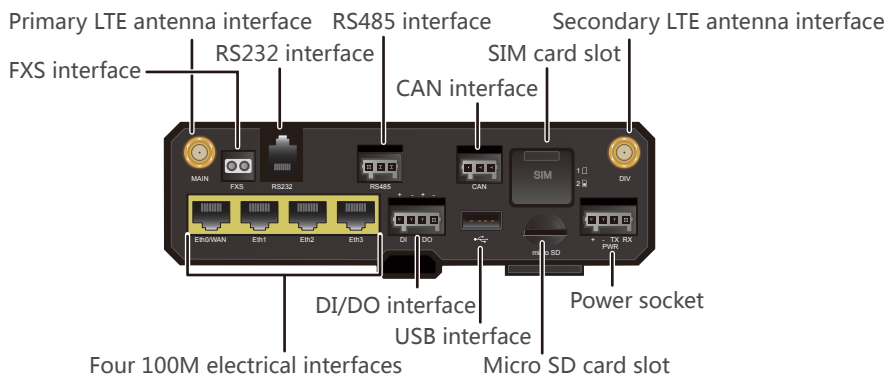


# Appearance



- Note**
- The AR-Sc-Lc-BC, AR-SC-U-BC, AR-Se-U-BC, AR-Se-L-BC, AR-Sa-U-BC, and AR-Sa-La-BC routers are the same in appearance and indicators and only differ in nameplates. AR-Sc-Lc-BC is used as an example here.
  - The AR-Sc-Lc-MC, AR-Se-L-MC, and AR-Sa-La-MC routers are the same in appearance and indicators and only differ in nameplates. AR-Sc-Lc-MC is used as an example here.
  - The AR-Sc-MC and AR-Se-MC routers are the same in appearance and indicators and only differ in nameplates. AR-Sc-MC is used as an example here.

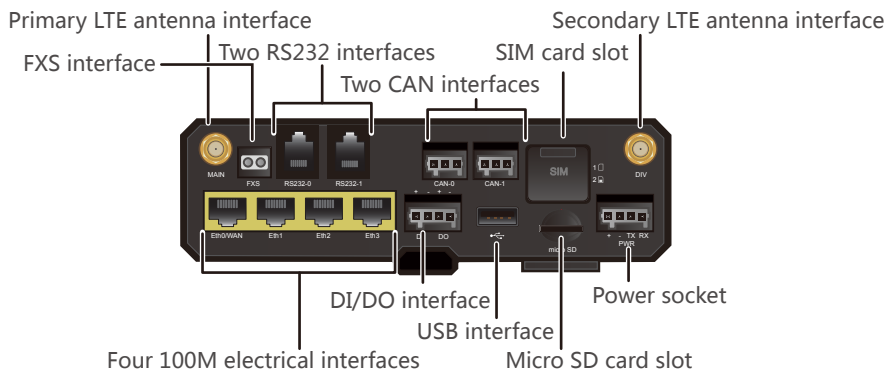
## ■ AR-Sc-Lc-BC (front view)



## ■ AR-Sc-Lc-BC (rear view)



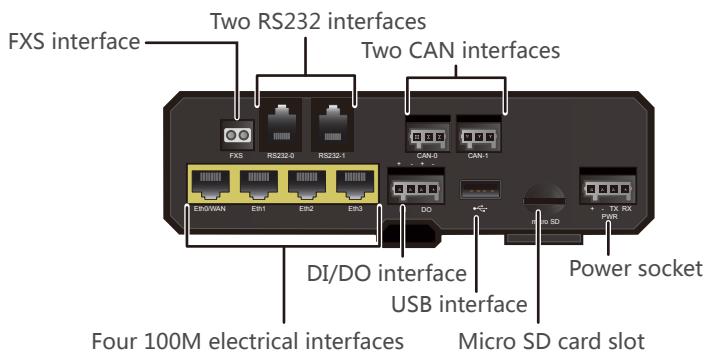
## ■ AR-Sc-Lc-MC (front view)



## ■ AR-Sc-Lc-MC (rear view)



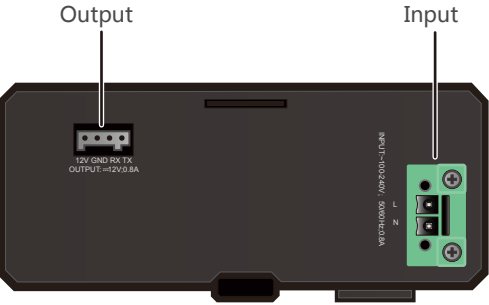
## ■ AR-Sc-MC (front view)



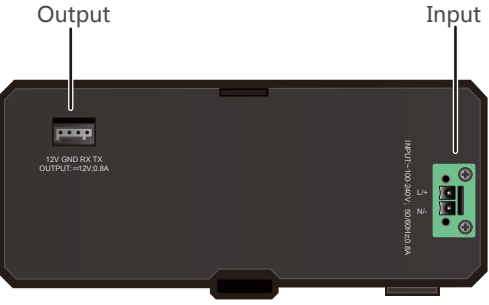
## ■ AR-Sc-MC (rear view)



■ AR-PM1 (front view)



■ AR-PM4 (front view)



■ AR-PM1 (rear view)

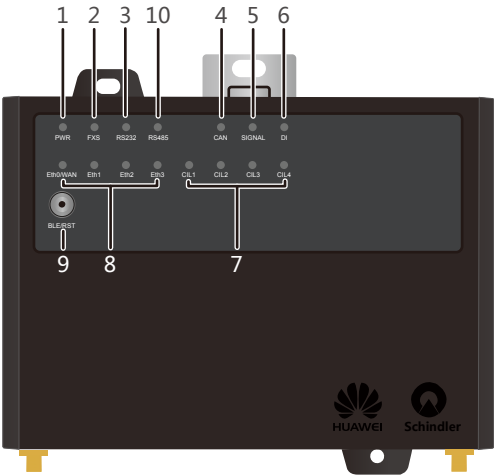


■ AR-PM4 (rear view)

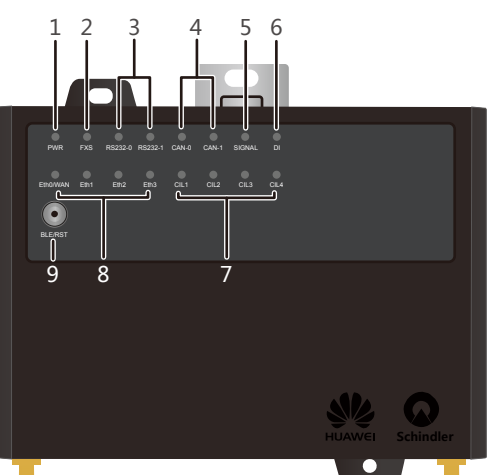


## Indicator Description

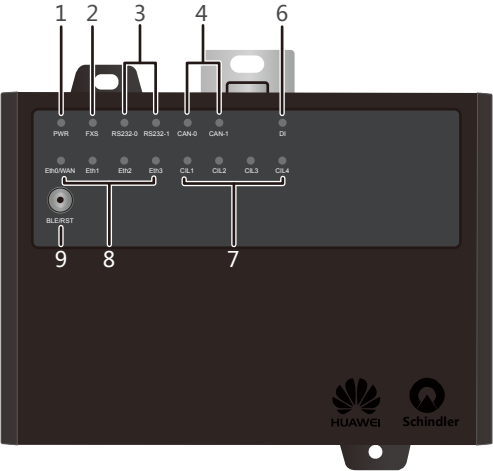
■ Indicators of AR-Sc-Lc-BC



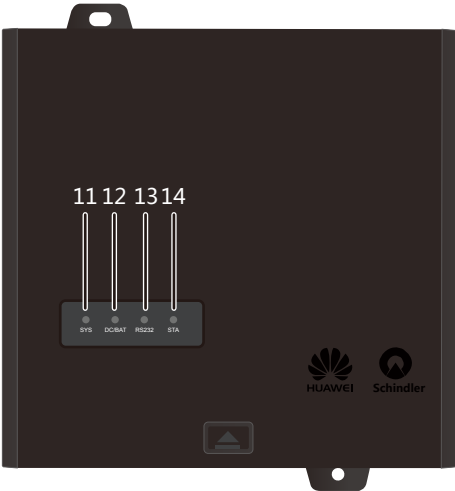
■ Indicators of AR-Sc-Lc-MC



■ Indicators of AR-Sc-MC



■ Indicators of AR-PM1



■ Indicators of AR-PM4



| Number | Indicator               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | PWR                     | Steady green: The power supply to the router is normal.<br>Off: The router receives no power supply.                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2      | FXS                     | Steady green: The FXS channel is idle.<br>Blinking green: There is an ongoing call on the FXS channel.<br>Off: The FXS channel is occupied.                                                                                                                                                                                                                                                                                                                                                                                 |
| 3      | RS232                   | Indicator states can be user defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 4      | CAN                     | Indicator states can be user defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 5      | SIGNAL                  | Indicator states can be user defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 6      | DI                      | Indicator states can be user defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 7      | CIL ( CIL1 ~ CIL4 )     | Indicator states can be user defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 8      | Eth ( Eth0/WAN ~ Eth3 ) | Steady green: A link has been established on the corresponding interface.<br>Blinking green: Data is being transmitted on the corresponding link.<br>Of: No link is established on the corresponding interface.                                                                                                                                                                                                                                                                                                             |
| 9      | BLE/RST                 | <div> <div>CL1</div> <div>CL2</div> <div>CL3</div> <div>CL4</div> </div> <div> <div>Press once to enable Bluetooth</div> <div>Fast blink</div> <div>Fast blink</div> <div>Fast blink</div> <div>Steady on</div> </div> <div> <div>Press twice to reset the router</div> <div>Fast blink</div> <div>Fast blink</div> <div>Steady on</div> <div>Steady on</div> </div> <div> <div>Press 3 times to restore factory settings</div> <div>Fast blink</div> <div>Steady on</div> <div>Steady on</div> <div>Steady on</div> </div> |
| 10     | RS485                   | Indicator states can be user defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 11     | SYS                     | Steady green: The UPS is starting.<br>Blinking green: The UPS has started successfully.<br>Off: The UPS has not started.                                                                                                                                                                                                                                                                                                                                                                                                    |
| 12     | DC/BAT                  | Steady green: The power module of the router is working.<br>Blinking green: The UPS is working.<br>Off: The UPS is not working.                                                                                                                                                                                                                                                                                                                                                                                             |
| 13     | RS232                   | Steady green: The router is connected to the UPS.<br>Off: The router is not connected to the UPS.                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 14     | STA                     | Steady green: The battery of the UPS is working normally.<br>Fast blinking green: The batter of the UPS can provide power supply for less than 1 hour (4 hours).<br>Slow blinking green: The battery of the UPS has failed or run out of power.<br>Off: The UPS is not working.                                                                                                                                                                                                                                             |



# Installing the Router



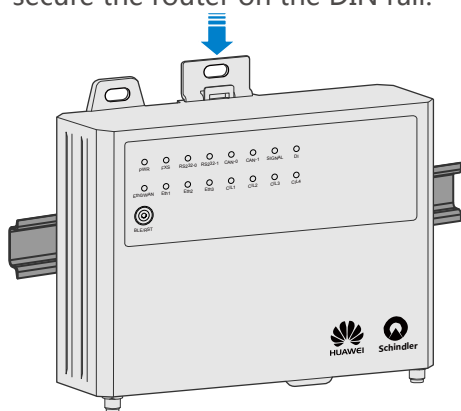
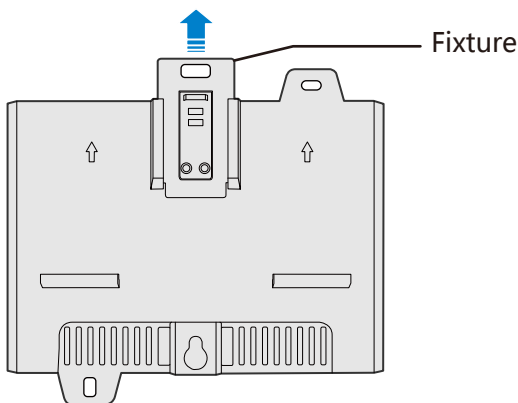
- Note**
- The methods for installing, connecting and logging in to the AR-Sc, AR-Se, AR-Sa, AR-So series routers and AR-PM series UPS are similar. AR-Sc-Lc-MC is used as an example here.
  - AR-PM series UPS cannot be mounted on a Wall.

## Scenario 1: Installing the Router on a DIN Rail

Before the installation, ensure the following:

- Sufficient space has been reserved for the router.
- The DIN rail has been fixed.

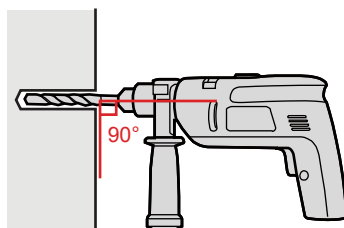
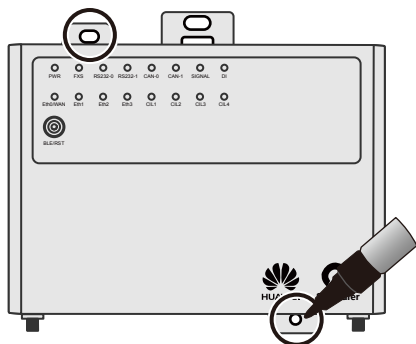
- 1 Pull the fixture on the DIN rail mounting kit at the back of the router.
- 2 Place the DIN rail mounting kit onto the DIN rail and press the fixture to secure the router on the DIN rail.



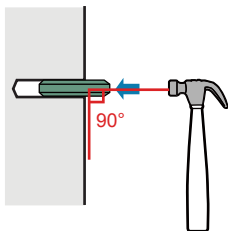
## Scenario 2: Mounting the Router on a Wall

### Installation Method 1

- 1 Mark the positions of two mounting holes on the wall.
- 2 Drill holes for ST4.2 tapping screws on the wall using a hammer drill with an appropriate drill bit.



- ③ Hammer hollow wall anchors into the mounting holes.

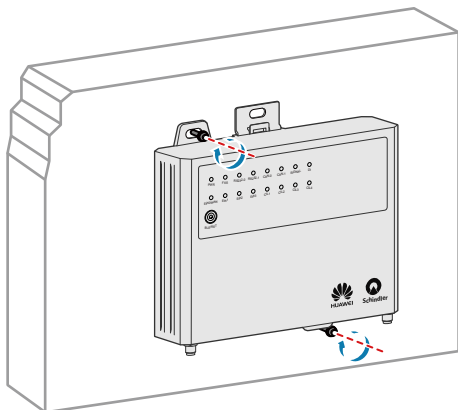


- ④ Hold the bottom of the router and fix it on the wall with two ST4.2 tapping screws.



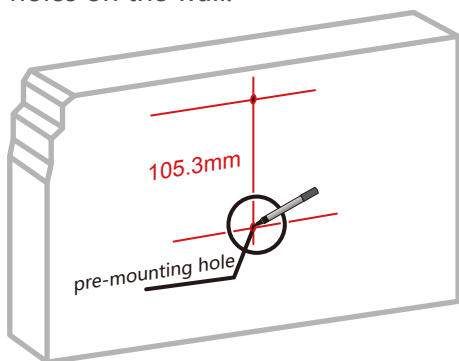
### Note

The torque for an ST4.2 screw is 0.8 N·m.

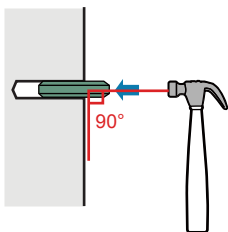


## Installation Method 2

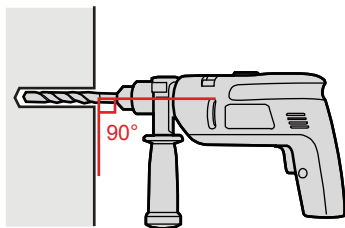
- ① Mark the positions of two mounting holes on the wall.



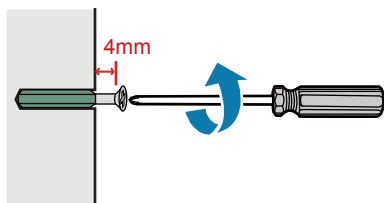
- ③ Hammer hollow wall anchors into the mounting holes.



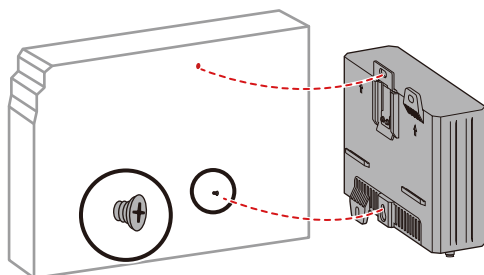
- ② Drill holes for ST4.2 tapping screws on the wall using a hammer drill with an appropriate drill bit.



- 4 Use a Phillips screwdriver to screw an ST4.2 tapping screw into the pre-mounting hole. Leave 4 mm length of the screw out of the wall.

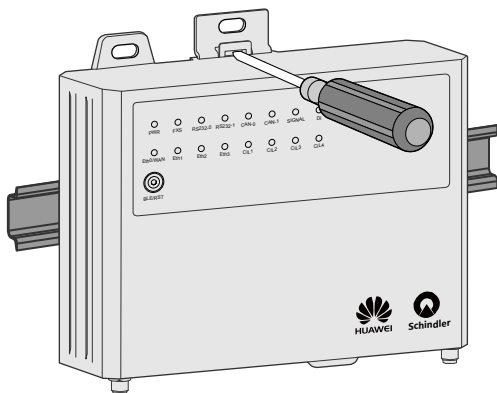


- 5 Hang the router on the tapping screw through the pre-mounting hole at the back. Hold the bottom of the router and use another ST4.2 tapping screw to secure the router on the wall.



## Removing the Router from the DIN Rail

- 1 Use a flat-head screwdriver to press the metal plate on the DIN rail mounting kit, remove the fixture, and then remove the router from the DIN rail.

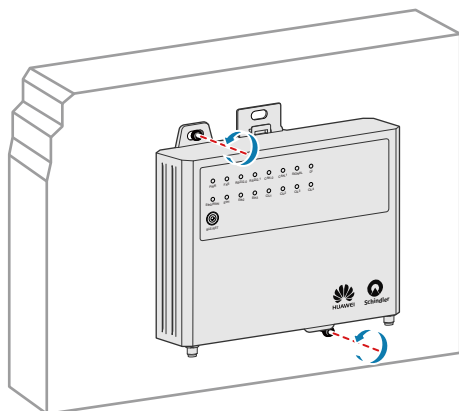


## Removing the Router from the Wall



**Note** The router is removed in the same way regardless of whether it has been installed using method 1 or 2. In this example, the router is installed using method 1.

- 1 Hold the bottom of the router, use a Phillips screwdriver to loosen the tapping screws, and then remove the router from the wall.





# Connecting the Router



## WARNING

- To avoid electric shock, do not connect power cables while the power is on.
- Do not power on the router before you finish connecting and arranging cables.



## Note

- An LTE remote antenna is delivered with the router. Connect it to the LTE MAIN interface of the router.
- For other interfaces, make cables onsite using self-provided terminals. The following tables provide pin assignments of different interfaces.
- The FXS interface cannot connect to a PSTN network and is only used for internal.

### ■ Power socket pin assignments



1                  4

| Pin | Signal Type |
|-----|-------------|
| 1   | +           |
| 2   | -           |
| 3   | TX          |
| 4   | RX          |

### ■ USB interface pin assignments



1                  4

| Pin | Signal Type |
|-----|-------------|
| 1   | VBUS        |
| 2   | D-          |
| 3   | D+          |
| 4   | GND         |

### ■ FXS interface pin assignments



1                  2

| Pin | Signal Type |
|-----|-------------|
| 1   | a           |
| 2   | b           |

### ■ RS485 interface pin assignments



1                  3

| Pin | Signal Type |
|-----|-------------|
| 1   | RS485 a     |
| 2   | RS485 b     |
| 3   | C_GND       |

■ CAN interface pin assignments



1 3

| Pin | Signal Type |
|-----|-------------|
| 1   | CAN_L       |
| 2   | CAN_H       |
| 3   | NC          |

■ RS232 interface pin assignments



1 6

| Pin | Signal Type |
|-----|-------------|
| 1   | COM         |
| 2   | RX          |
| 3   | TX          |
| 4   | NC          |
| 5   | RTS         |
| 6   | CTS         |

■ Connecting the Router to a UPS



- Note**
- The AR-Sc and AR-Se series routers support AR-PM1 UPS power supplies.
  - The AR-Se-MC, AR-So and AR-Sa series routers support AR-PM4 UPS power supplies.
  - The routers are connected to a UPS in the same way. The following example connects an AR-Sc-Lc-BC router to an AR-PM1 UPS.

■ DI/DO interface pin assignments



1 4

| Pin | Signal Type |
|-----|-------------|
| 1   | DI+         |
| 2   | DI-         |
| 3   | DO+         |
| 4   | DO-         |

■ Eth interface pin assignments



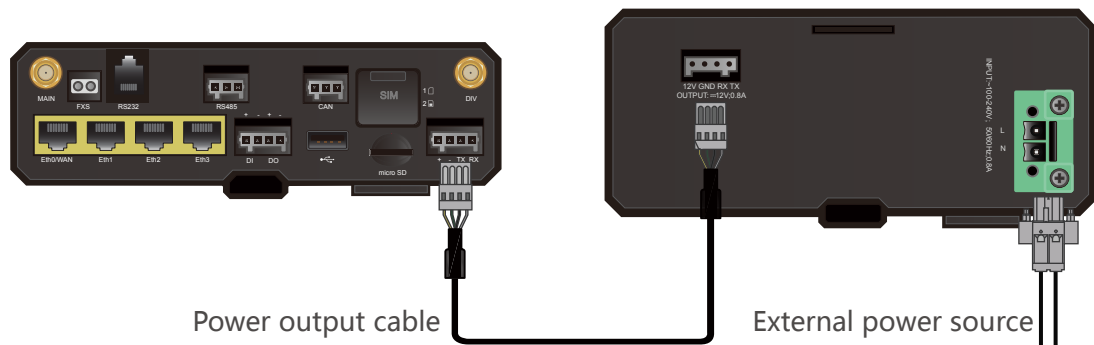
1 8

| Pin | Signal Type |
|-----|-------------|
| 1   | TX+         |
| 2   | TX-         |
| 3   | RX+         |
| 4   | NC          |
| 5   | NC          |
| 6   | RX-         |
| 7   | NC          |
| 8   | NC          |

Power output cable: delivered with the UPS.

Power input cable: made onsite using the 2-pin terminal block delivered with the UPS.

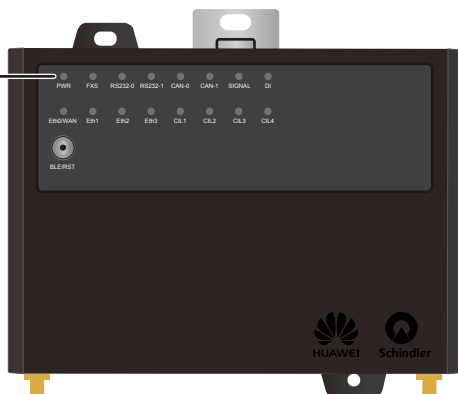
The diameter of the cable must be 16-22 AWG.



## ↑ Powering On the Router

- 1 Before you power on the router, ensure the following:
  - The power cable has been properly connected.
  - The input voltage is within the normal range (12 V DC to 24 V DC).
- 2 Turn on the power switch of the external power supply system.
- 3 Check the PWR indicator on the front panel of the router.

PWR Steady green: The system power supply is normal.



## ⚙ Declaration of Conformity

Hereby, Huawei Technologies Co., Ltd. declares that the radio equipment type is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: [www.huawei.com/en/product-certification](http://www.huawei.com/en/product-certification).