# RRU3908
# V100
# Installation Guide

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HUAWEI TECHNOLOGIES Co., Ltd.

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# Safety Information

## Following All Safety Precautions

Before any operation, read the instructions and precautions in this document carefully to minimize the possibility of accidents.

The Danger, Caution, and Note items in the documents do not cover all the safety precautions that must be followed. They only provide the generic safety precautions for operations.

When operating Huawei products and equipment, you must comply with safety precautions and special safety instructions related to corresponding equipment provided by Huawei. The safety precautions in the document are related to only Huawei products. Huawei is not liable for any consequence that results from the violation of universal regulations for safety operations and safety codes on design, production, and equipment use.

## Complying with the Local Safety Regulations

When operating the device, comply with the local safety regulations. The safety precautions provided in the documents are supplementary. You must comply with the local safety regulations.

## Qualified Personnel Only

The personnel in charge of installation and maintenance must be trained and master the correct operating methods and safety precautions before beginning work.

## Symbols

| | |
|---|---|
| **DANGER** | *Indicates a hazard with a high level of risk, which if not avoided,will result in death or serious injury.* |
| **WARNING** | *Indicates a hazard with a medium or low level of risk, which if not avoided, could result in minor or moderate injury.* |
| **CAUTION** | *Indicates a potentially hazardous situation, which if not avoided,could result in equipment damage, data loss, performance degradation, or unexpected results.* |
| **TIP** | *Indicates a tip that may help you solve a problem or save time.* |
| **NOTE** | *Provides additional information to emphasize or supplement important points of the main text.* |

## Safety of Personnel

- The high voltage power supply provides power for running the system. Direct contact with the high voltage power supply or contact through damp objects may result in fatal danger.
- Non-standard and improper high voltage operations may result in fire and electric shock.
- In a thunderstorm, do not perform operations on high voltage and AC power supply facilities or on a steel tower and mast.
- Ground the device before powering on the device. Otherwise, the personnel and device are in danger.
- Power off the device before performing operations on the power supply equipment.
- High power radio-frequency signals are harmful to human body. Before installing or maintaining an antenna on a steel tower or mast with a large number of transmitter antennas, the operator should coordinate with all parties to ensure that the transmitter antennas are shut down.
- When handling optical fibers, do not stand close to, or look into the optical fiber outlet with unaided eyes.
- Protect yourself when drilling holes. Flying dust may hurt your eyes or you may inhale the dust.
- Power off the batteries before connecting the cables to the batteries. Otherwise, casualties may occur.
- When working at a height, be cautious about falling objects.

## Device Safety

- Check the electrical connection of the device before operation and ensure that the device is reliably grounded.
- The static electricity generated by the human body may damage the electrostatic sensitive components on the circuit board, such as the large-scale integrated circuit (LIC). Wear an ESD wrist strap or ESD gloves when performing the operation.
- When working on batteries, take measures to prevent short circuits in the batteries and electrolyte spill/loss. The electrolyte may erode metal and boards, or even cause rust of the equipment or short circuits in the boards.
- When the equipment is unpacked, it must be powered on in 24 hours. The maximum duration of the power-off state of the equipment is 24 hours during maintenance.

# Installation Tools

| | | |
|---|---|---|
| Insulated screwdriver | Cross screwdriver | Straight screwdriver |
| Adjustable wrench | Socket wrench | Torque wrench |
| Power cable crimping pliers | RJ-45 crimping pliers | Wire cutter |
| Rubber hammer | Claw hammer | Cable peeler |
| Percussion drill | Heat gun | Level bar |
| Multimeter | Long measuring tape | Vacuum cleaner |

# Installing the DC RRU3908

## a Installation Modes

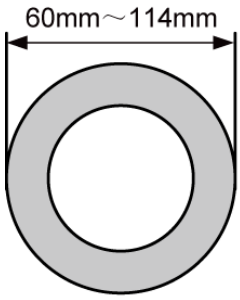
On a metal pole

On a wall

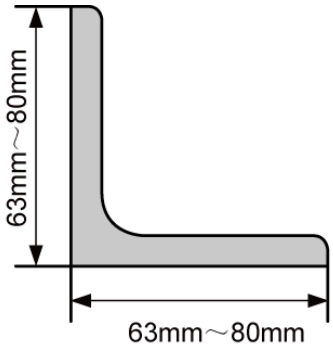
On an angle steel

On a U-steel

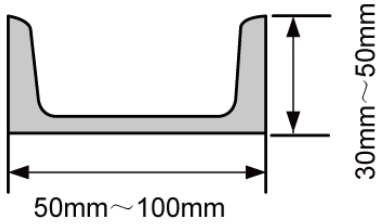
The following figure describes the specifications for the metal pole, angle steel, and U-steel where the RRU is installed.



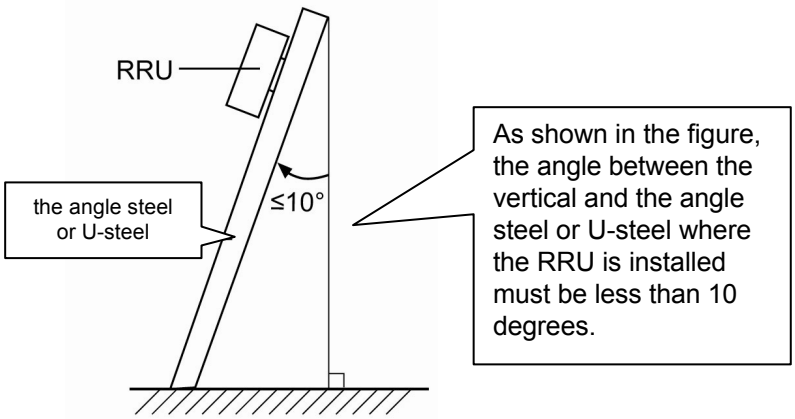

Metal pole




Angle steel




U-steel




**CAUTION**

**Only one RRU can be installed on a U-steel or angle steel at the back.**

**A single RRU can be lifted to the tower. For details, see page 32.**

**WARNING**

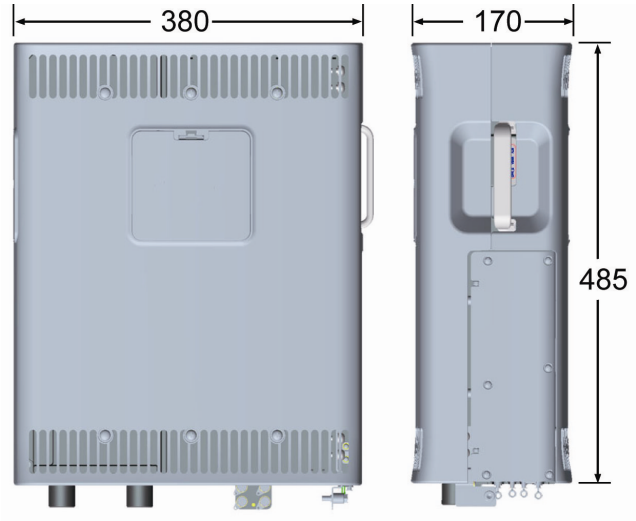
**1. The maximum bearing capability of the wall equals four times of the RRU weight, and a single RRU3908 weighs 23 kg.**

**2. When the RRU is mounted on the wall, tighten the expansion bolts to 30 N·m. Ensure that the expansion bolts are properly tightened and there is no crack on the wall.**

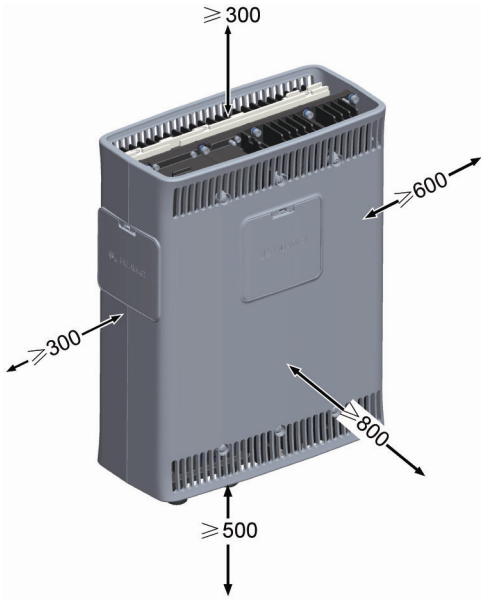
# Installing the DC RRU3908

## b Space Requirements (Unit: mm)

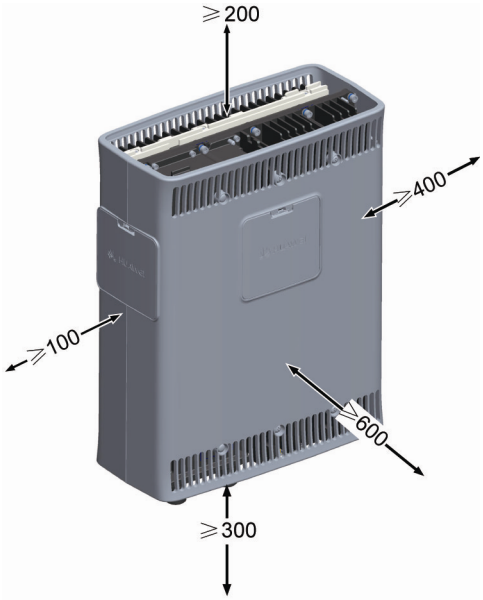
### 1. RRU Dimensions



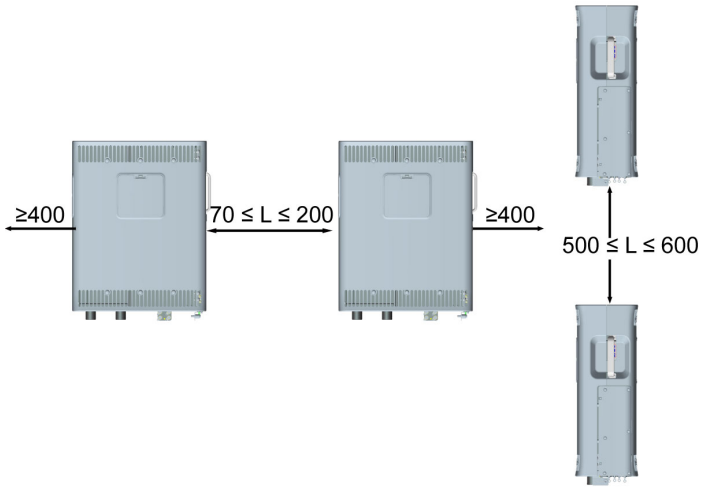

### 2. Recommended Clearance for a Single RRU




### 3. Minimum Clearance for a Single RRU

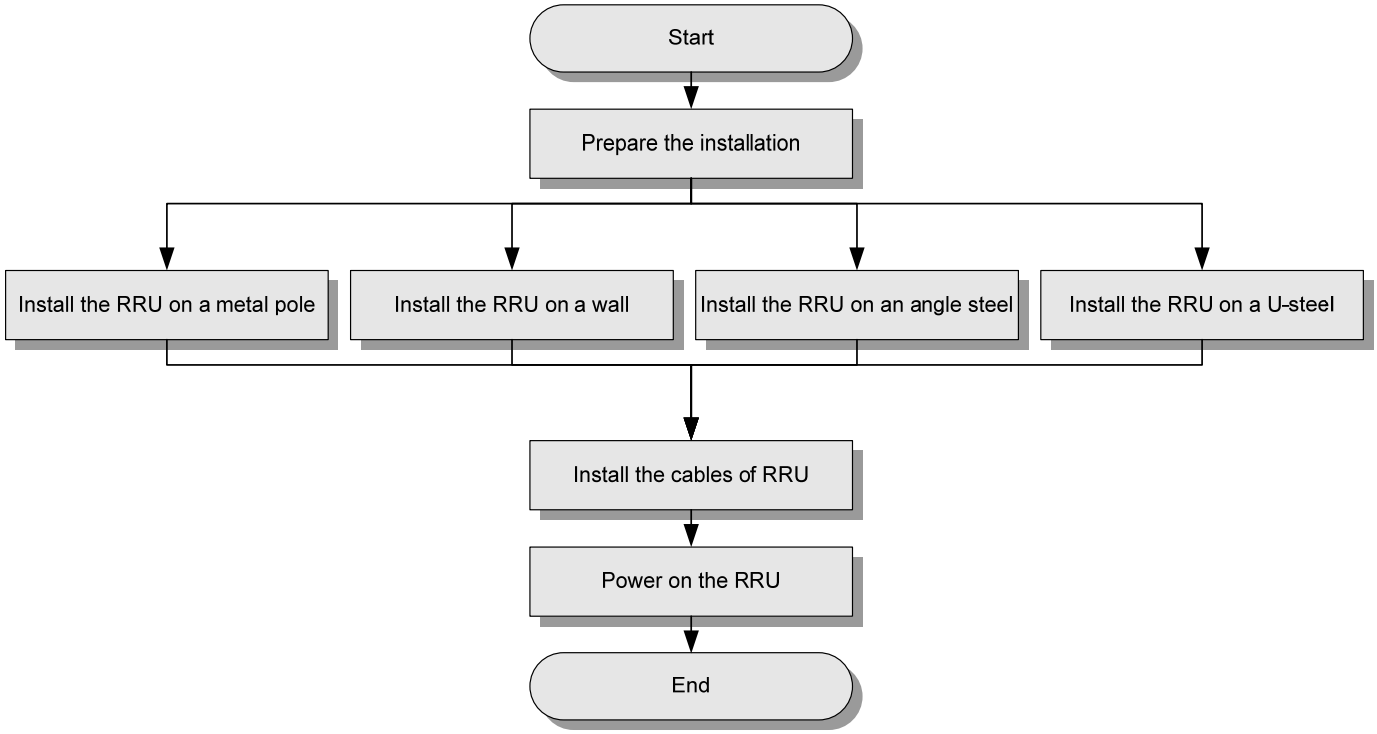



### 4. Clearance for Two Combined RRUs

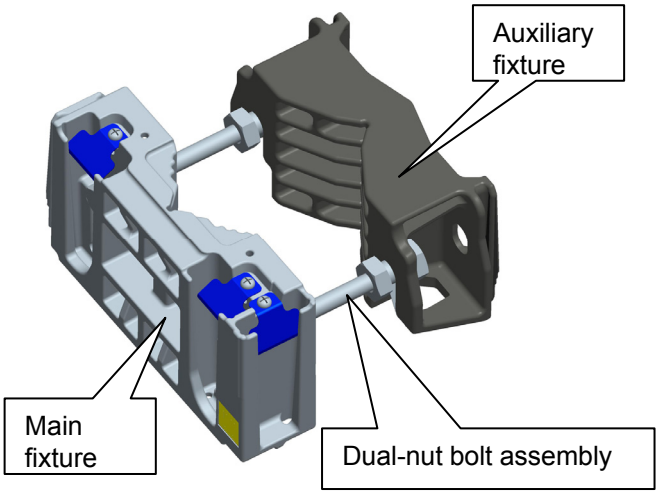


# Installing the DC RRU3908

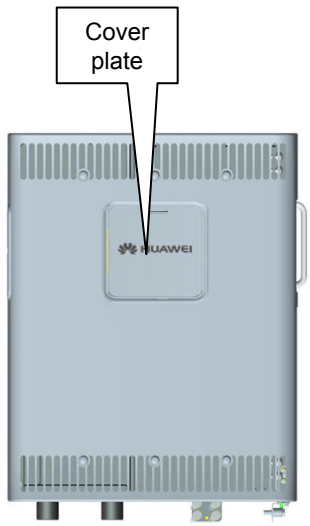
## c Installation Procedure



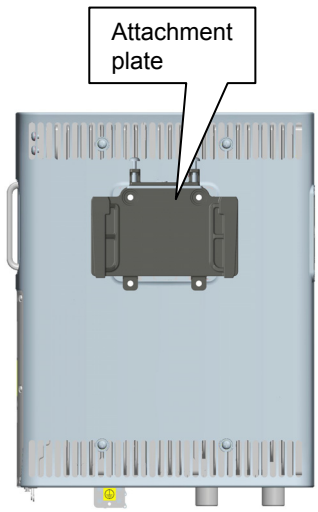

## d Preparing for the Installation




Fixture assembly for installing the RRU




Front of the RRU

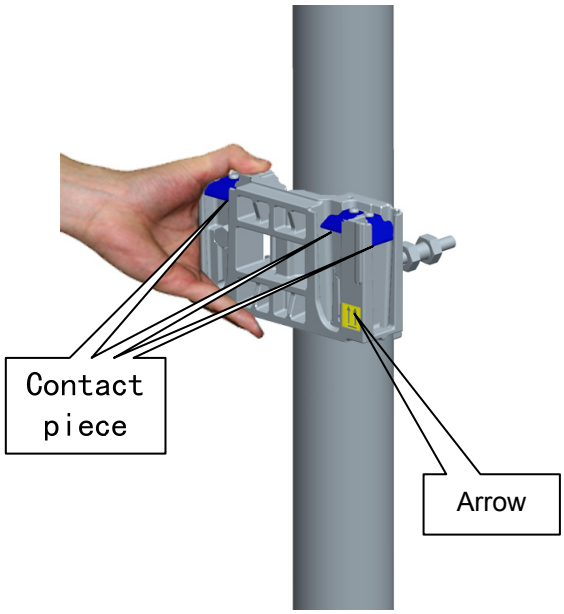



Back of the RRU

# Installing the DC RRU3908

## e Installing the RRU on a Metal Pole

### 1. Install the main fixture.



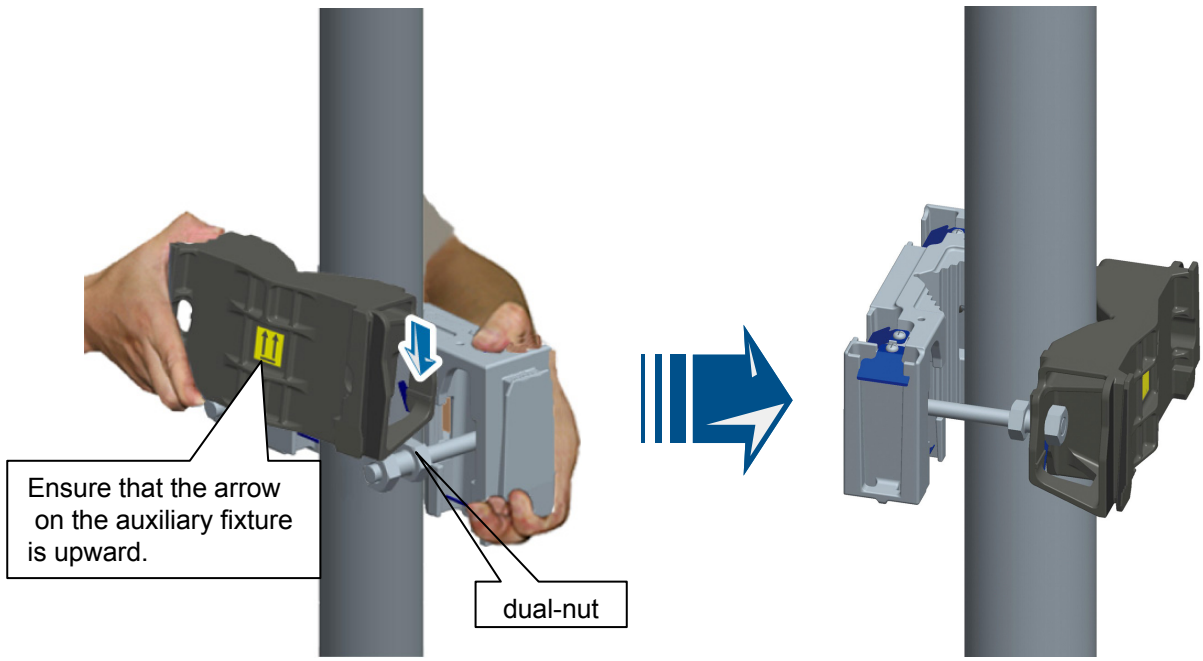

**CAUTION**

**1. When installing the main fixture, ensure that the contact piece on the fixture is fixed.**
**2. When installing the main fixture, ensure that the arrow on the main fixture is upward.**

**NOTE**

It is recommended that the bottom of the highest main fixture be 1200 mm to 1600 mm above the ground for easy maintenance.

### 2. Install the auxiliary fixture between the nuts of the dual-nut bolt assembly on the main fixture.




**TIP**: You may fit one end of the auxiliary fixture on one dual-nut bolt assembly and then the other end on the other dual-nut bolt assembly during the installation.

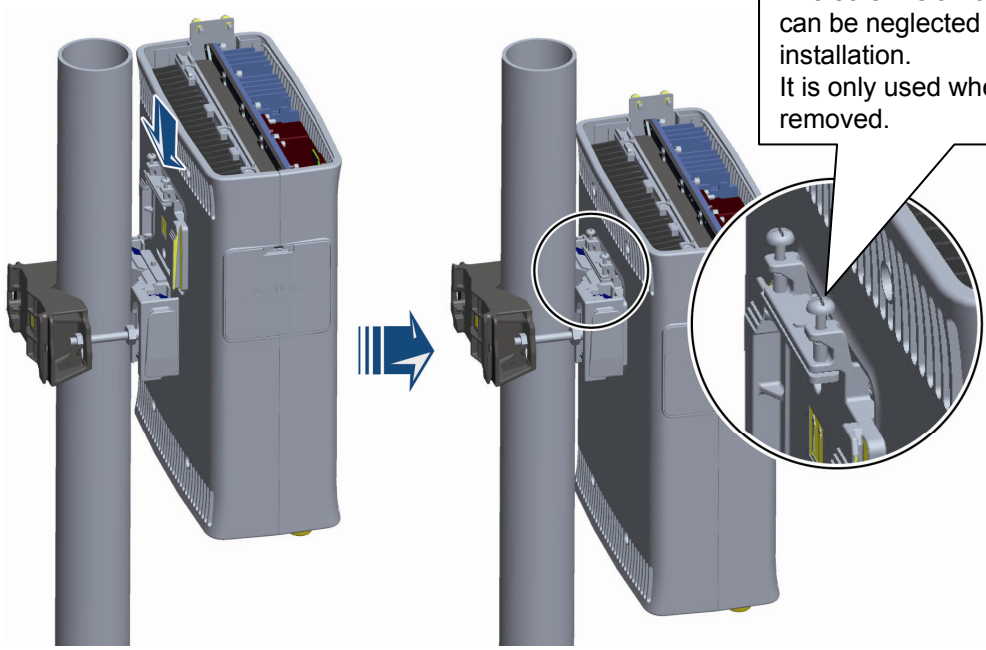
## e Installing the RRU on a Metal Pole

### 3. Use an adjustable wrench to tighten the nut until the fastening torque is 40 N•m. In this way, the main and auxiliary fixtures are secured on the pole.

**⚠ CAUTION**

**Fasten the two dual-nut bolt assemblies alternatively. After the brackets are secure, use a tape to measure the spacing between the main bracket and the auxiliary bracket at the two sides and ensure that the spacing is the same.**

### 4. Install the RRU on the main bracket. When you hear a click, you can infer that the RRU is in position.

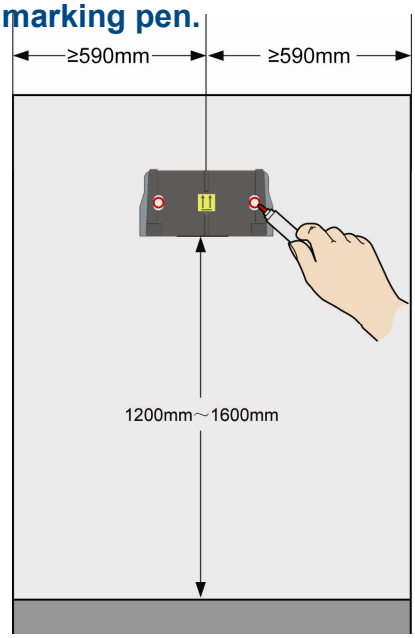



**The RF port at the bottom of the RRU does not have load bearing capacity. Do not place the RRU on the ground on its bottom during the installation.**

# Installing the DC RRU3908

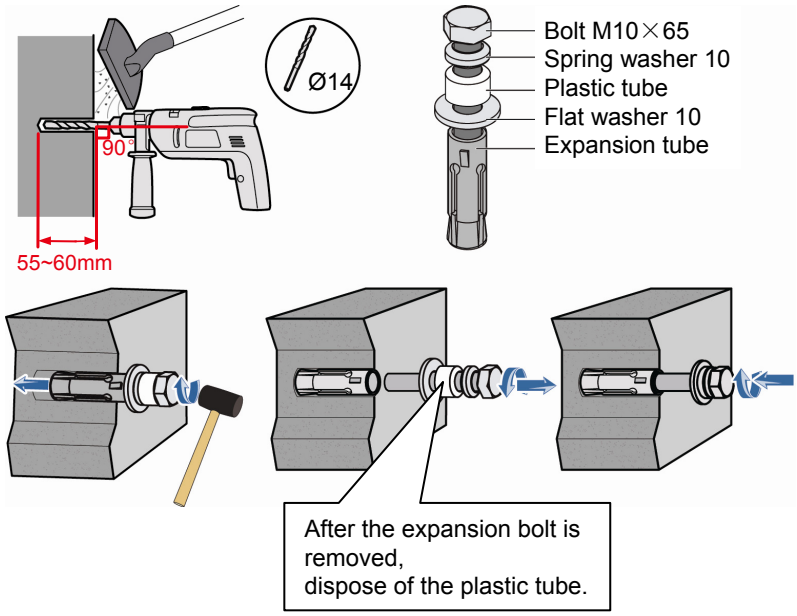
## f Installing the RRU on a Wall

### 1. Place the auxiliary fixture on the wall at the installation position and then mark the anchor points by using a marking pen.



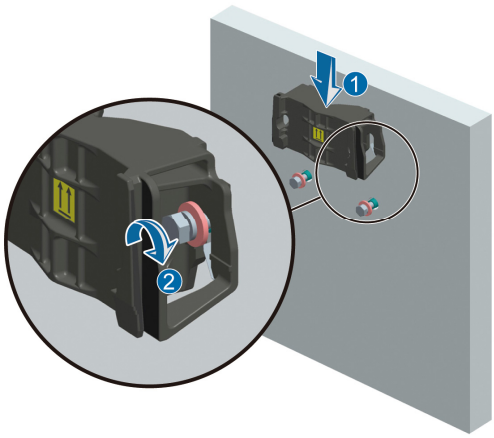

**NOTE**
It is recommended that the bottom of the auxiliary fixture be 1200 mm to 1600 mm above the ground.

### 2. Drill holes at the anchor points and then install the expansion bolt assemblies.

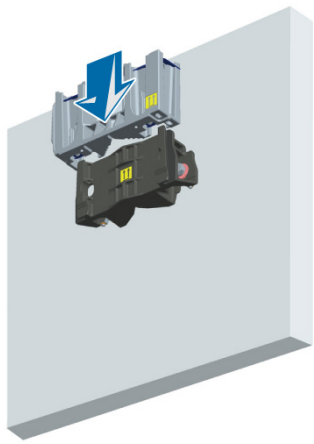



**CAUTION**
**Do not hammer the bolt entirely into the expansion tube, and leave 20 mm to 30 mm of the bolt outside the wall.**

### 3. Fit the auxiliary fixture on the expansion bolts downward, and then tighten the bolts by using a combination wrench (17 mm - 17 mm).



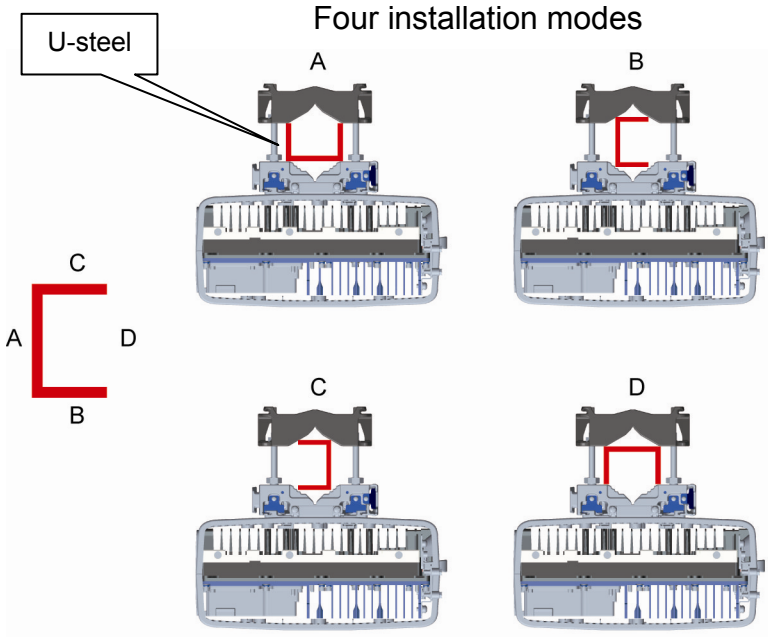

### 4. Install the main bracket, and then use a level bar to adjust the levelness of the bracket.



### 5. Install the RRU.

# Installing the DC RRU3908

## g Installing the RRU on a U-Steel



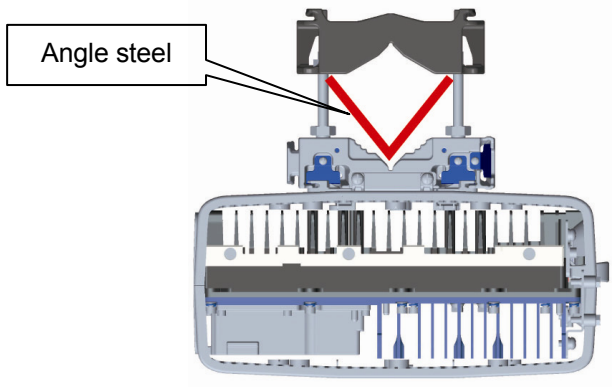

Top view

**CAUTION**

**The procedure for installing the RRU on a U-steel is the same as that on a metal pole.**

**Only one RRU can be installed on a U-steel at the back.**

## h Installing the RRU on an Angle Steel




Top view

**CAUTION**

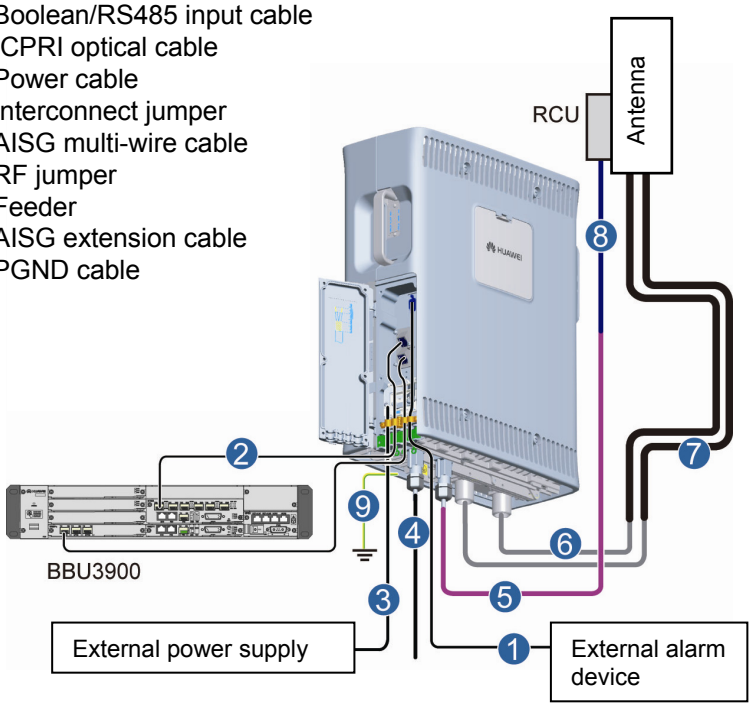
**The procedure for installing the RRU on an angle steel is the same as that on a metal pole.**

**Only one RRU can be installed on an angle steel at the back.**

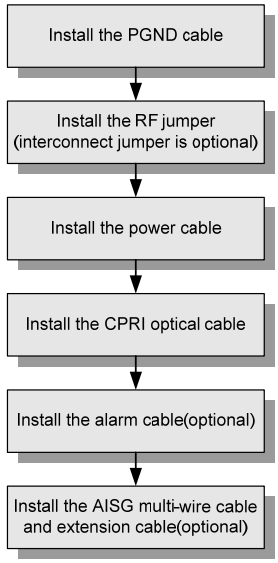
# Installing the DC RRU3908

## i Cable Connections of a Single RRU

①Boolean/RS485 input cable
② CPRI optical cable
③Power cable
④Interconnect jumper
⑤AISG multi-wire cable
⑥RF jumper
⑦Feeder
⑧AISG extension cable
⑨PGND cable

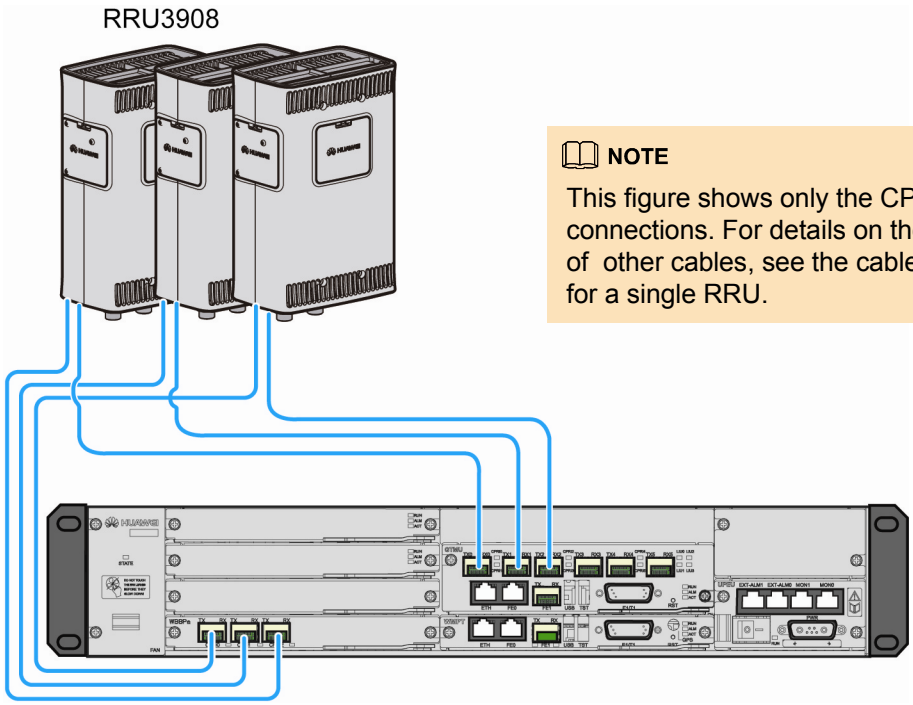



**Sequence of Installing the Cables**



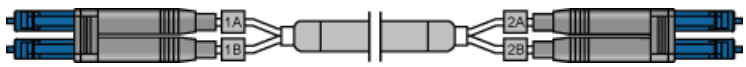

**CAUTION**
**When a dual-polarized antenna is shared by two RRUs in the same sector, the two RRUs are connected through an inter-RRU jumper. The connections of three RRUs in the same sector are not supported.**

## j Cable Connections of Multiple RRUs

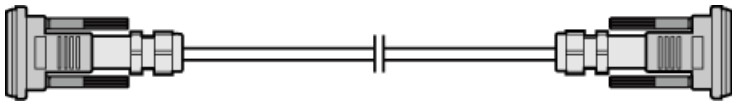
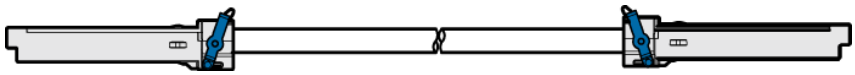
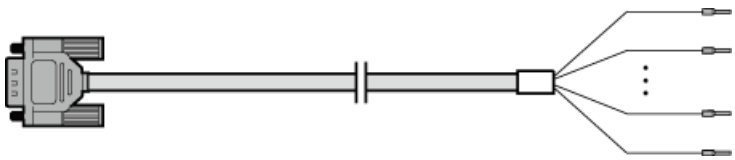



**NOTE**
This figure shows only the CPRI optical cable connections. For details on the connections of other cables, see the cable connections for a single RRU.

## k Cable List

| Cable | Connector Type | Connected to··· |
|---|---|---|
| PGND cable | OT terminal | Grounding bolt on the RRU |
| | OT terminal | Nearest grounding bar |
| | | |
| RF jumper | DIN male connector | Ports labeled ANT_TX/RXA and ANT_RXB on the RRU |
| | DIN male connector | Feeder or antenna |
| | | |
| Power cable | Two OT terminals | The OT terminal on the blue wire is connected to the NEG(-) port on the cabling cavity of the RRU. The OT terminal on the black wire is connected to the RTN(+) port on the cabling cavity of the RRU |
| | Bare wire | External power supply |
| | | |
| CPRI optical cable | DLC connector | Connect the fiber tails labeled 1A and 1B to the CPRI_W port on the RRU |
| | DLC connector | Connect the fiber tails labeled 2A and 2B to one of the CPRI0 to CPRI5 ports on the GTMU |
| |  | |
| AISG multi-wire cable | Waterproof DB9 connector | Port labeled RET/PWR_SRXU on the RRU |
| | Standard AISG female connector | Standard AISG male connector of the AISG extension cable or RCU |
| | | |

## k Cable List

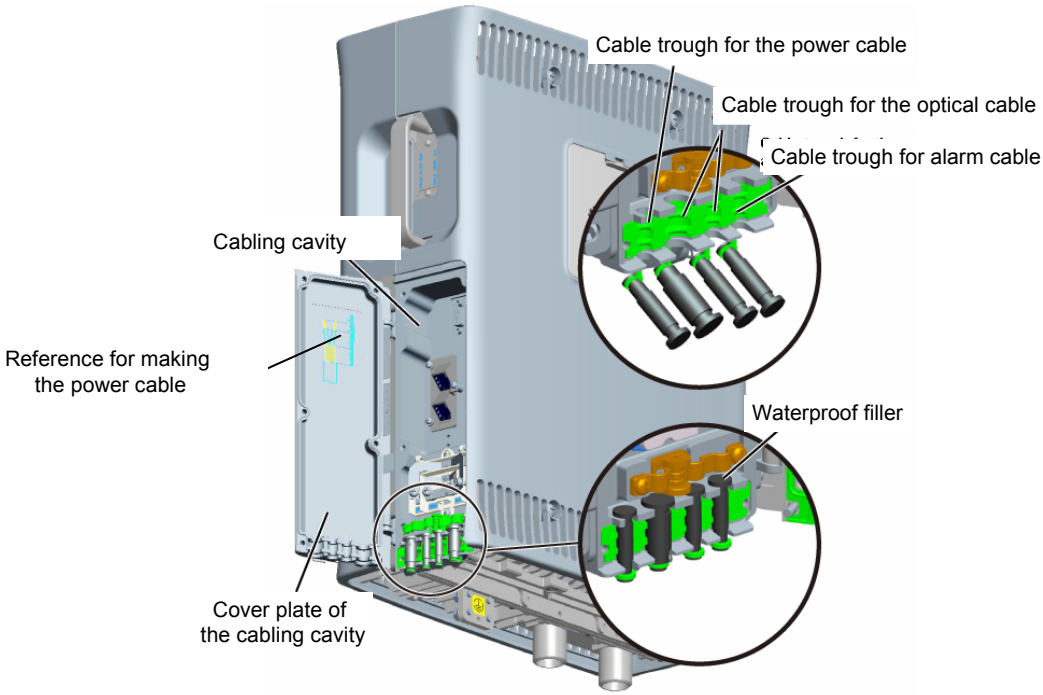
| Cable | Connector Type | Connected to··· |
|---|---|---|
| AISG extension cable | Standard AISG male connector | Standard AISG female connector of the AISG multi-wire cable |
| | Standard AISG female connector | Standard AISG male connector of the RCU |
| | | |
| Interconnect jumper | 2W2 connector | Port labeled RX_IN/OUT on the upper-level RRU |
| | 2W2 connector | Port labeled RX_IN/OUT on the lower-level RRU |
| |  | |
| SFP high-speed cable for cascading | SFP200 male connector | the CPRI_E port on the upper-level RRU |
| | SFP200 male connector | the CPRI_W port on the lower-level RRU |
| |  | |
| Alarm cable | DB15 male connector | Port labeled EXT_ALM in the RRU cabling cavity |
| | Eight cord end terminals | External alarm devices |
| |  | |

# Installing the DC RRU3908

## I Installing the RRU Cables

### 1. Opening the Cover Plate of the RRU Cabling Cavity

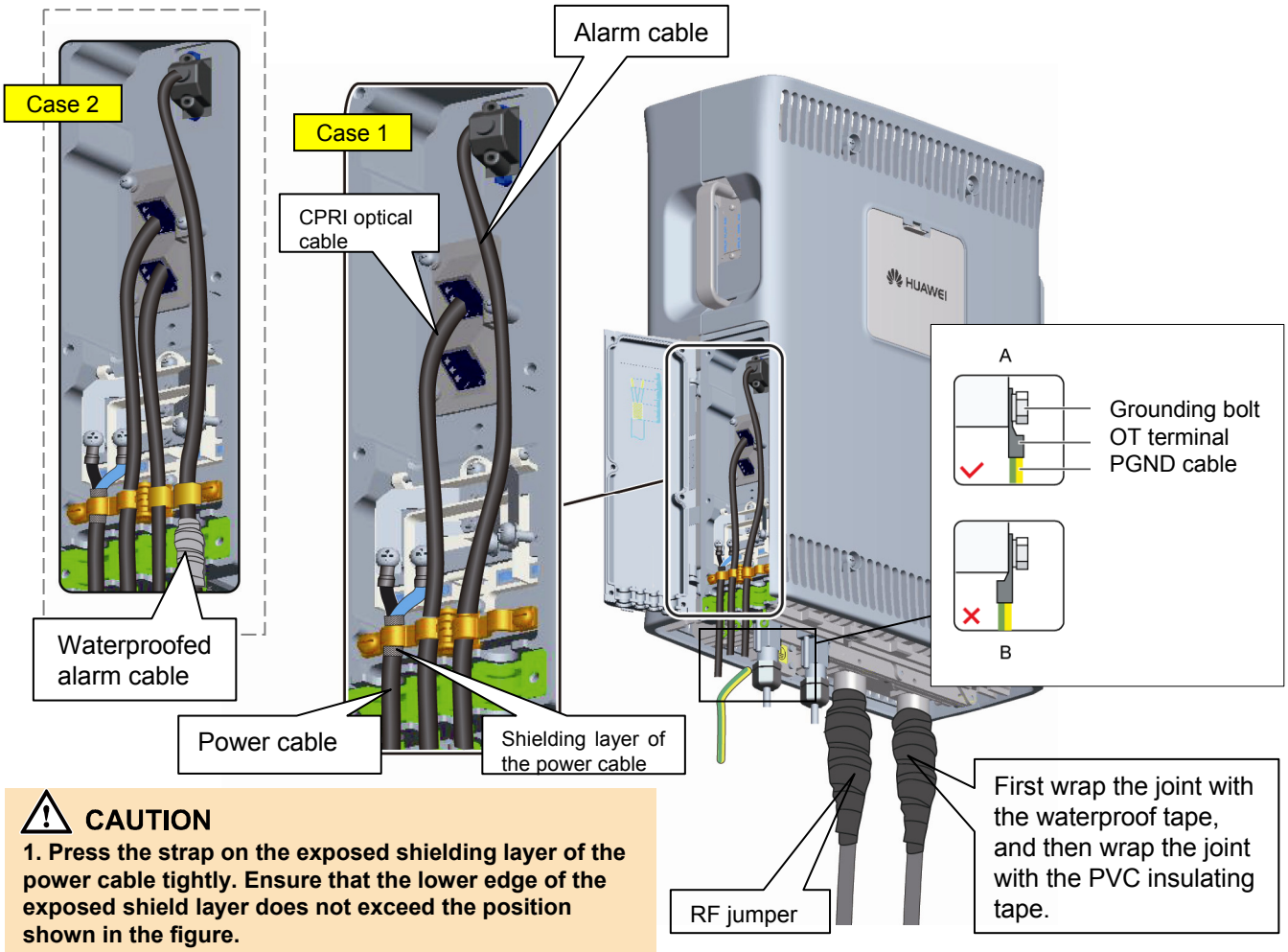
### 2. The Cabling Cavity of the RRU



# Installing the DC RRU3908

## I Installing the RRU Cables

### 3. Cable Connections of RRU




**CAUTION**

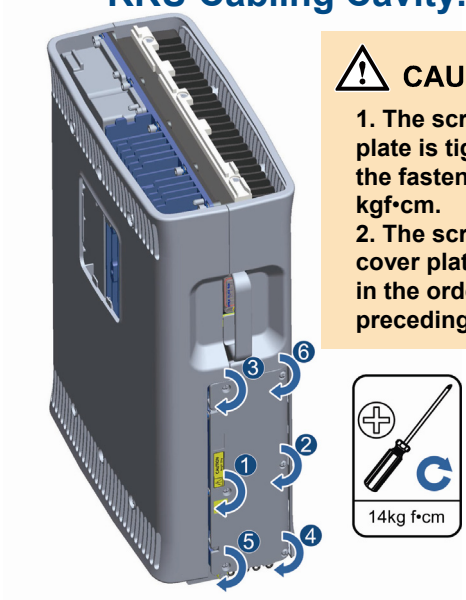
**1. Press the strap on the exposed shielding layer of the power cable tightly. Ensure that the lower edge of the exposed shield layer does not exceed the position shown in the figure.**
**2. The alarm cable is preferably led out of the RRU from the narrower cable trough in the middle of the cabling cavity. If the cable trough is used by the CPRI optical cable, the alarm cable is led from the wider cable trough near the middle one. In this case, the alarm cable must be wrapped with 10 to 17 layers of waterproof tape so that the diameter of the cable reaches 10 mm to 12 mm.**
**3. To avoid sharp bending, the optical cable must be pressed by the strap next to the power cable during the optical cable installation.**
**4. Waterproof fillers should be installed in the unused cable trough.**

**NOTE**

1. The tape is wrapped spirally upwards, downwards, and then upwards again in three layers. For every two adjacent tape layers, the tape on the upper layer overlaps about half the width of the tape on the lower layer.
2. Do not remove the dustproof cap from the feeder connectors that are not in use. In addition, protection measures against damp, dust, and salt mist must be taken. If the RRU is installed outdoors, you also need to wrap the joint with waterproof tape.

**For details on how to add the OT terminals to the power cable, see page 34.**

### 4. Closing the Cover Plate of the RRU Cabling Cavity.

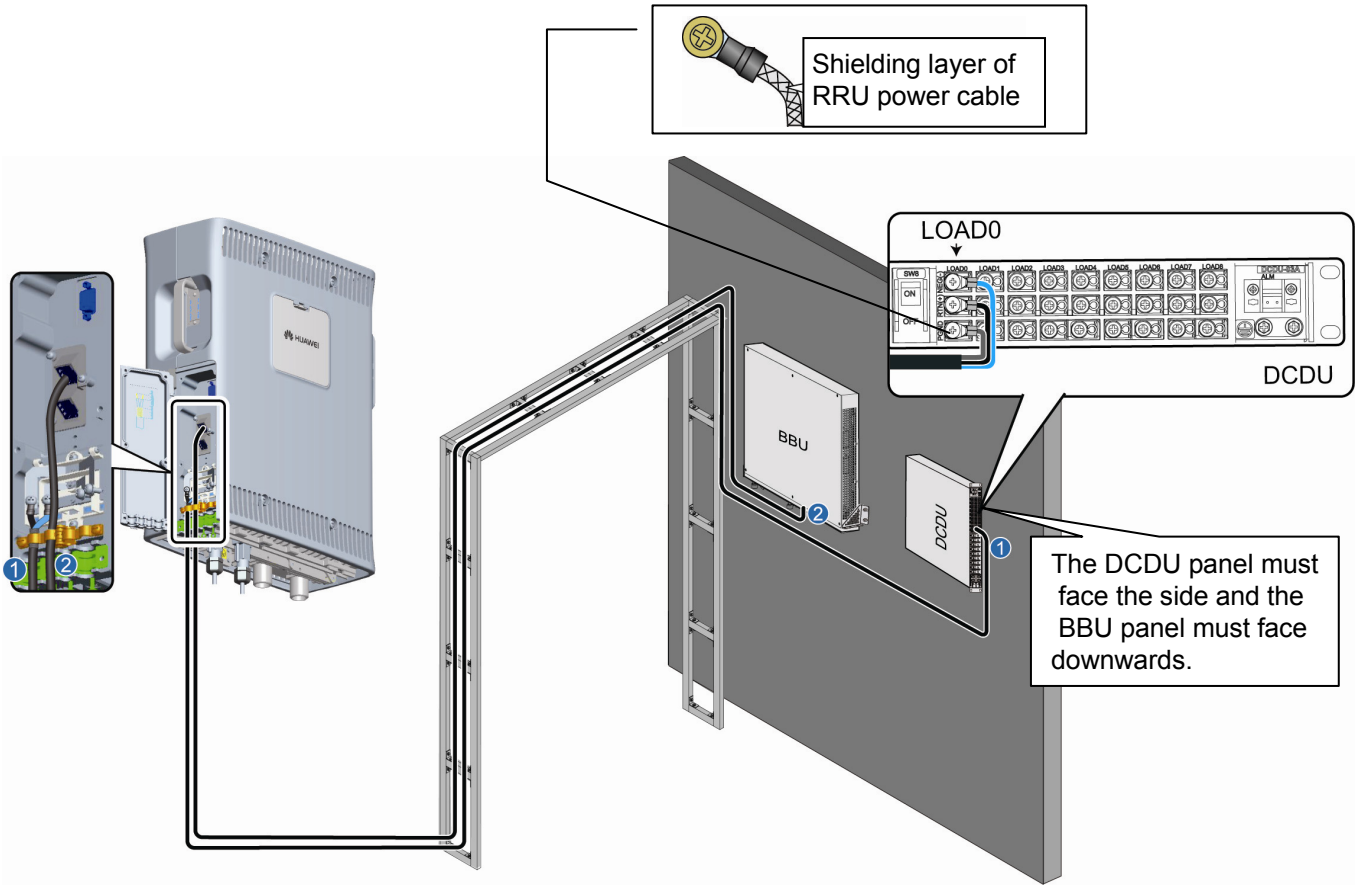



**CAUTION**

**1. The screw on the cover plate is tightened until the fastening torque is 14 kgf•cm.**
**2. The screws on the cover plate are tightened in the order shown in the preceding figure.**

## RRU Cable Installation Scenarios

### RRU+Wall-Mounted BBU




| | |
|---|---|
| (1) RRU power cable | (2) CPRI optical cable |

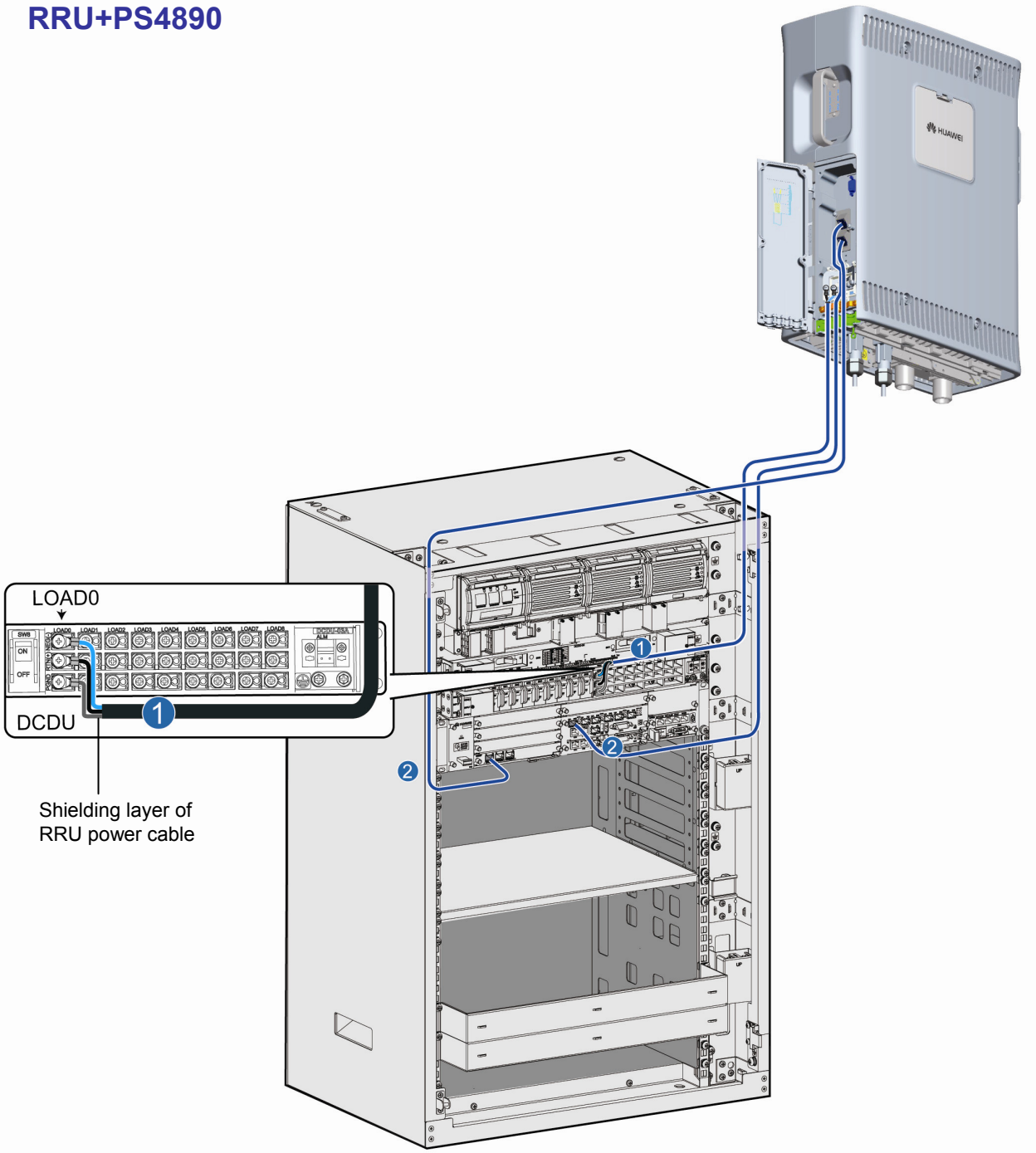
**NOTE**

1. The RRU power cable is connected to one of the LOAD0 to LOAD5 terminals of the DCDU-03B.
2. When connecting the RRU power cable to the DCDU-03B, you must add an OT terminal to the shielding layer. Then, fix the OT terminal to the corresponding PGND terminal of the DCDU-03B. For details on how to add an OT terminal, see page 35.

# Installing the DC RRU3908

## RRU Cable Installation Scenarios

### RRU+PS4890




| | |
|---|---|
| (1) RRU power cable | (2) CPRI optical cable |

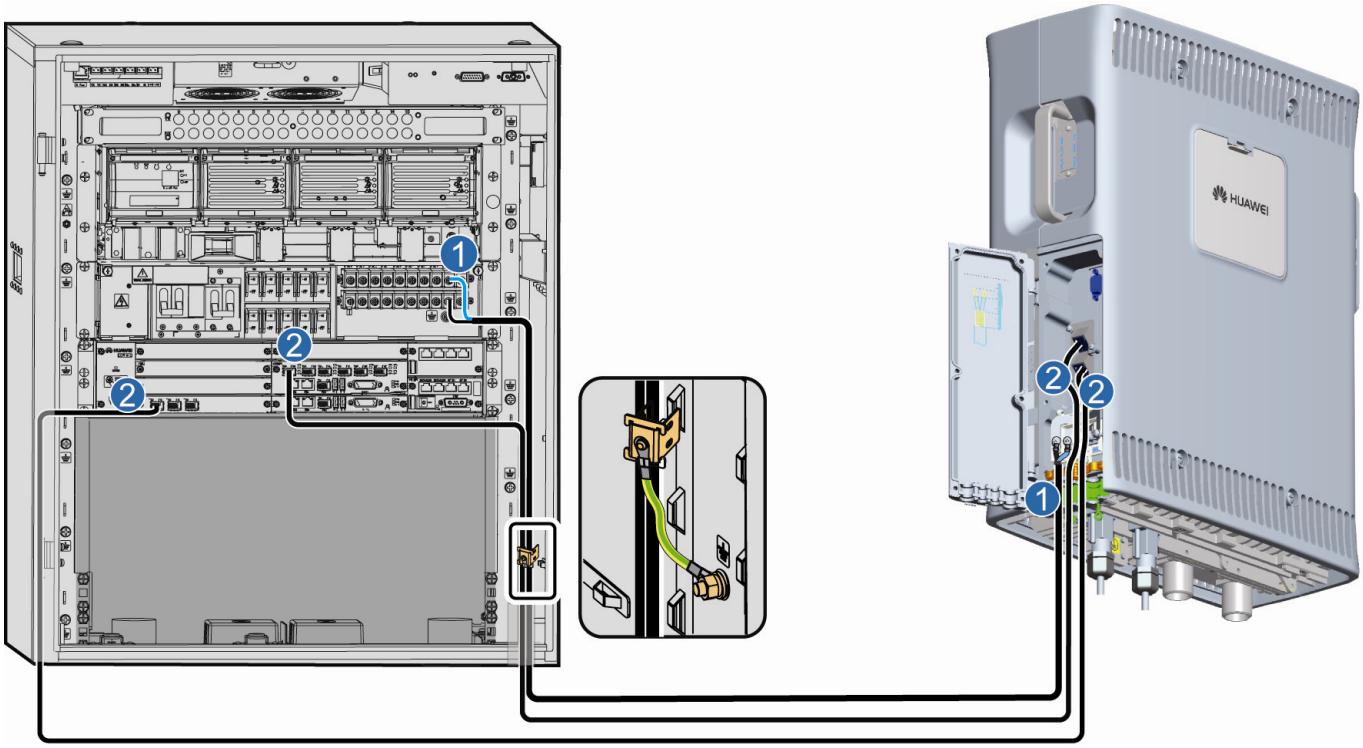
**NOTE**

1. The RRU power cable is connected to one of the LOAD0 to LOAD5 terminals of the DCDU-03B.
2. When connecting the RRU power cable to the DCDU-03B, you must add an OT terminal to the shielding layer. Then, fix the OT terminal to the corresponding PGND terminal of the DCDU-03B. For details on how to add an OT terminal, see page 35.

# Installing the DC RRU3908

## RRU Cable Installation Scenarios

### RRU+APM30/APM30H




| | |
|---|---|
| (1) RRU power cable | (2) CPRI optical cable |

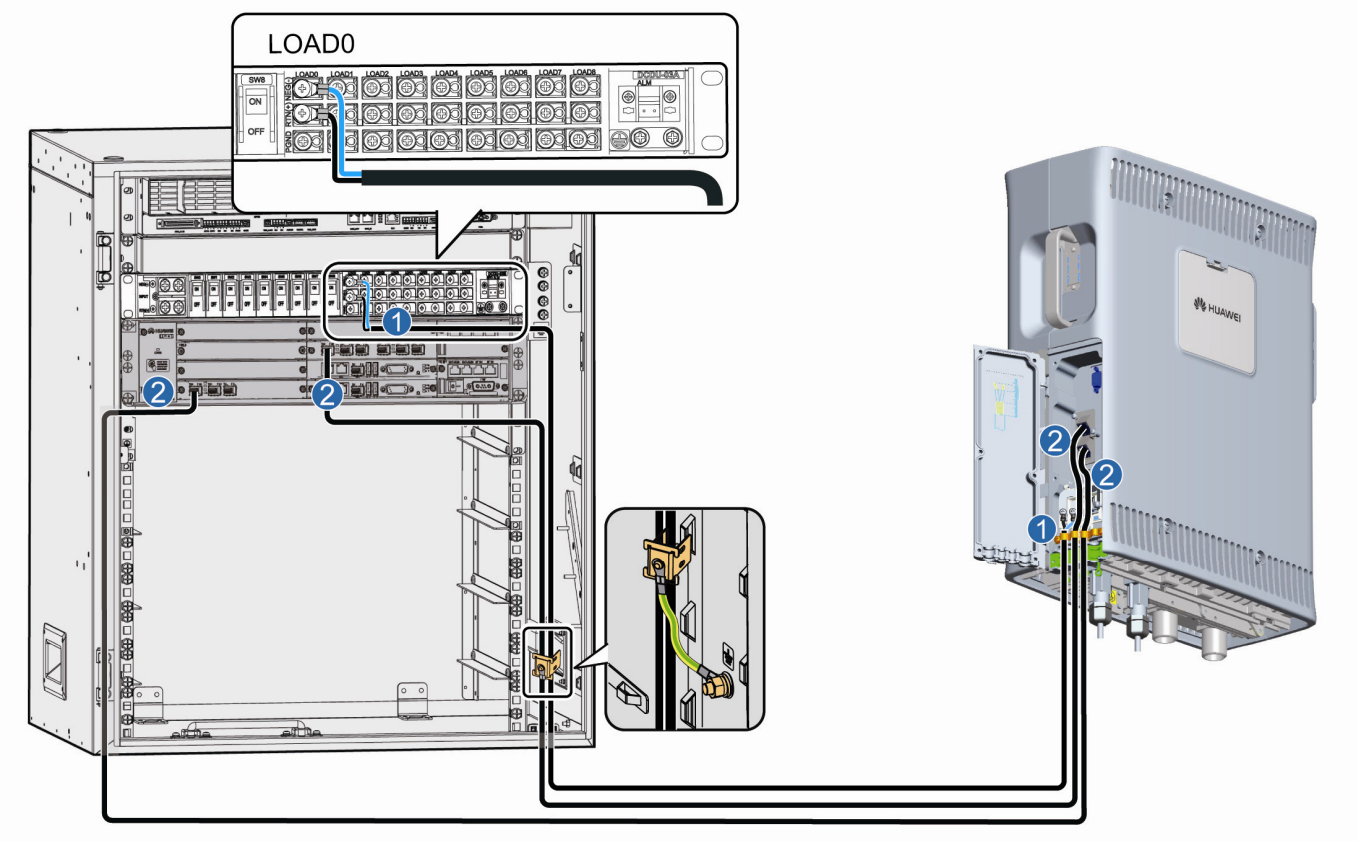
**NOTE**

1. The RRU power cable is connected to one of the LOAD4 to LOAD9 terminals of the PDU.
2. Strip the jacket of the RRU power cable for a small part, press the exposed shielding layer on the strap, and then connect the PGND cable on the strap to the nearest grounding bolt on the side in the APM30/APM30H.

# Installing the DC RRU3908

## RRU Cable Installation Scenarios

### RRU+TMC




| | |
|---|---|
| (1) RRU power cable | (2) CPRI optical cable |

**NOTE**

1. The RRU power cable is connected to one of the LOAD0 to LOAD5 terminals of the DCDU-03B.
2. When connecting the RRU power cable to the DCDU-03B, you must add an OT terminal to the shielding layer. Then, fix the OT terminal to the corresponding PGND terminal of the DCDU-03B. For details on how to add an OT terminal, see page 35.

# Installing the AC RRU3908

## a Space Requirements (Unit: mm)

**NOTE**

The recommended/minimal clearance for the AC RRU/clearance for Two Combined RRUs is the same as that for the DC RRU. For details, see page 4.

## b Installation Modes

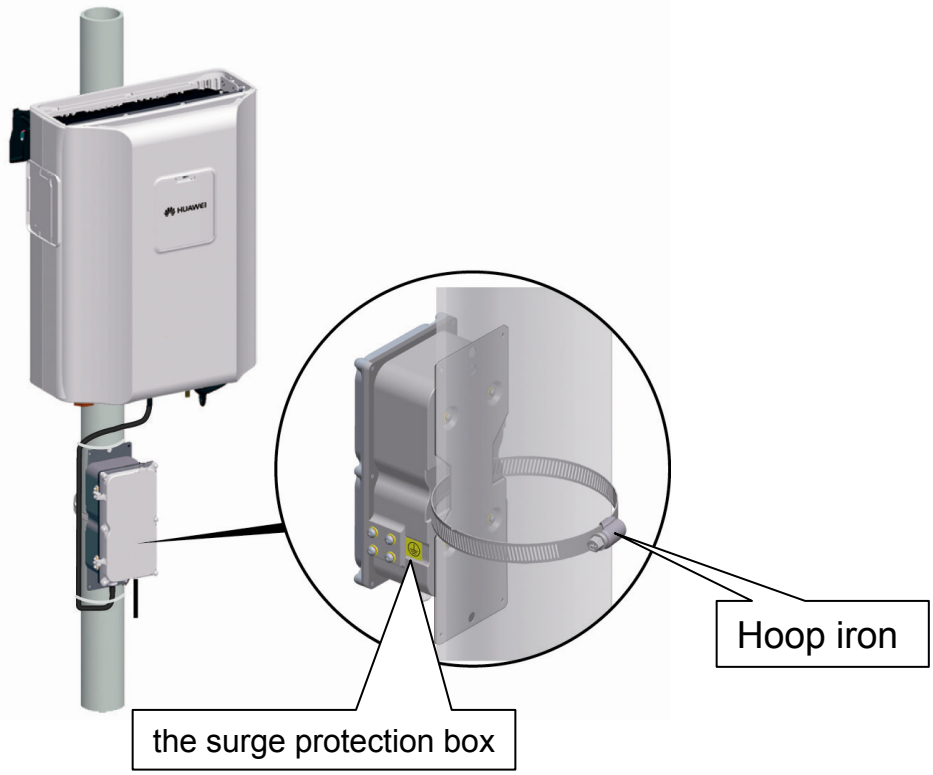
**On a metal pole** **On a wall** **On an angle steel** **On a U-steel**

**NOTE**

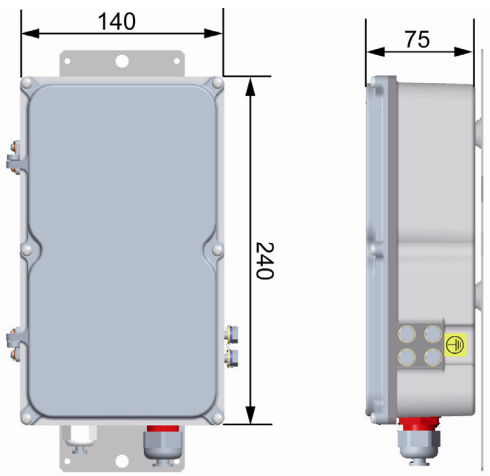
The AC RRU3908 cannot be installed at the side. When it is installed in other modes, the procedure is the same as that of the DC RRU3908.
For details, see page 7 to page 10.

## c Installing the Surge Protection Box (for Outdoor Scenarios)

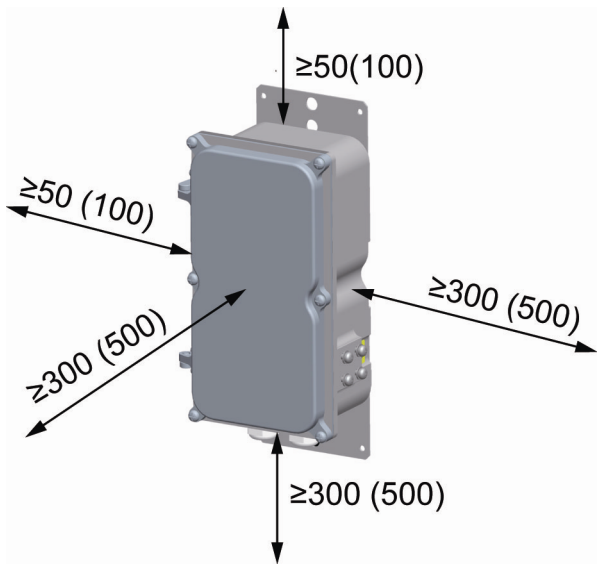
### Installation of the surge protection box




### Dimensions of the surge protection box (unit: mm):




### Minimal/Recommended clearance for the surge protection box:

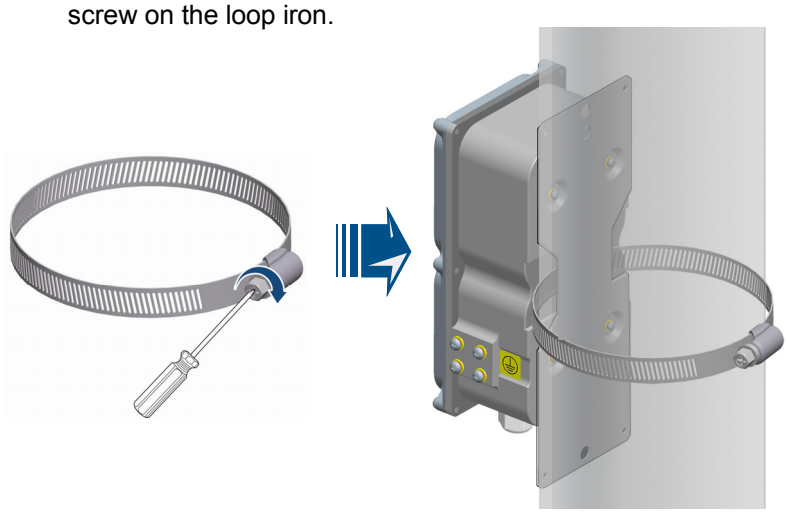



（Unit：mm）

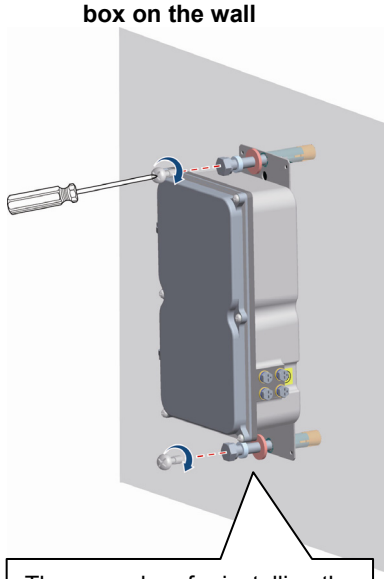
## c Installing the Surge Protection Box (for Outdoor Scenarios)

### 1. Install the surge protection box on the metal pole.

1.1 As shown in the figure, unfasten the screw on the loop iron with the torque of 48 kg f•cm.
1.2 Lead the loop iron through the opening between the back plate of the surge protection box and the surge protection box.
1.3 Circle the loop iron around the metal pole, and then tighten the screw on the loop iron.

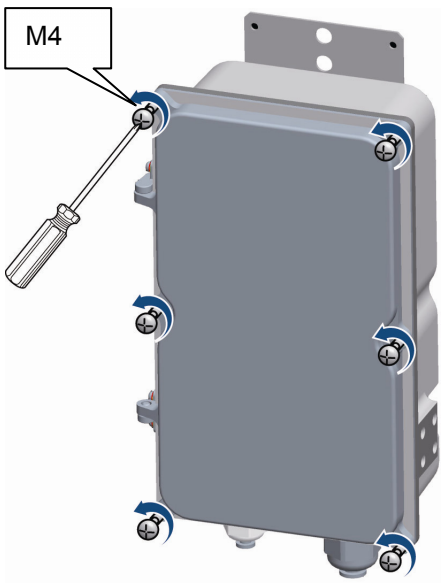


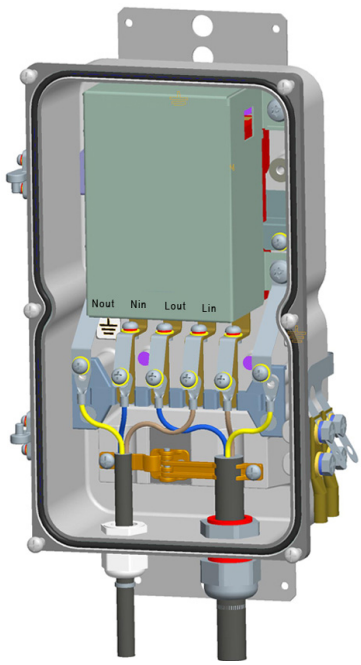
**Installing the surge protection box on the wall**



The procedure for installing the surge protection box on the wall is the same as that for installing the RRU on the wall. For details, see page 10.

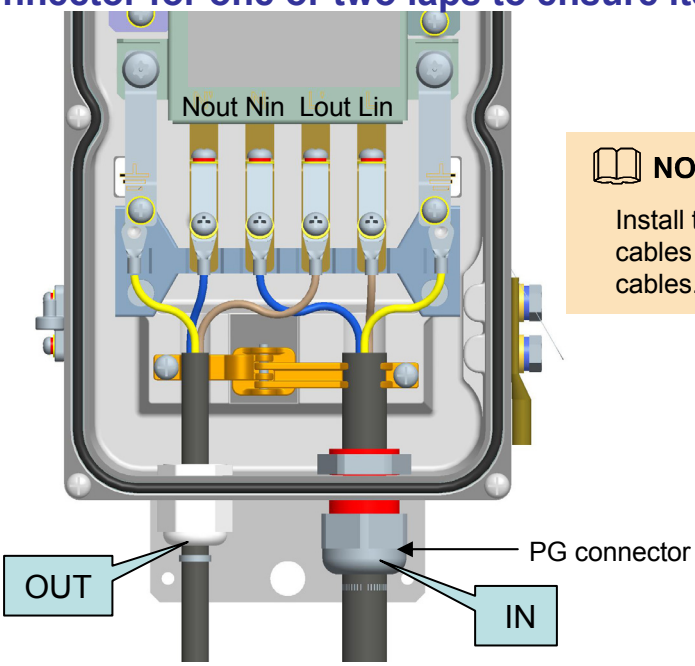
### 2. Open the cover of the surge protection box (by unfastening the screws with the torque of 48 kg f•cm).



## c Installing the Surge Protection Box (for Outdoor Scenarios)

3. Lead the external AC power cable through the PG connector labeled IN. The L, N, and PE wires of the power cable are connected to the Lin, Nin, and PE terminals on the surge protection box.
4. Lead the power cable between the RRU and the surge protection box through the PG connector labeled OUT. The Lin, Nin, and PE wires of the power cable are connected to the Lout, Nout, and PE terminals on the surge protection box.
5. Tighten the PG connector, and then use a wrench to further tighten the connector for one or two laps to ensure its waterproofing capability.

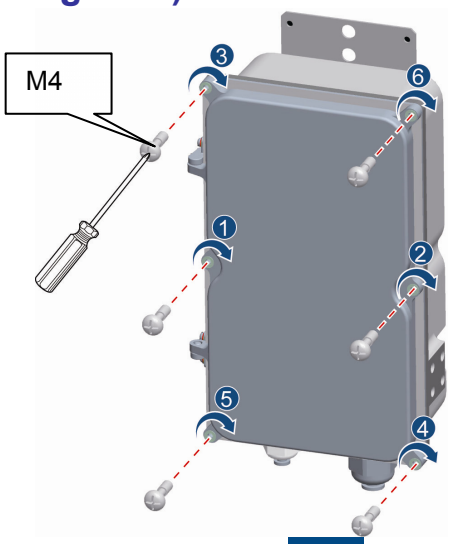



**NOTE**

Install the corrugated pipes for the AC power cables before installing the AC RRU power cables. For details, see page 36.

(The cable led through the PG connector labeled OUT is the power cable between the RRU and the surge protection box, and the cable led through the PG connector labeled IN is the external AC power cable.)

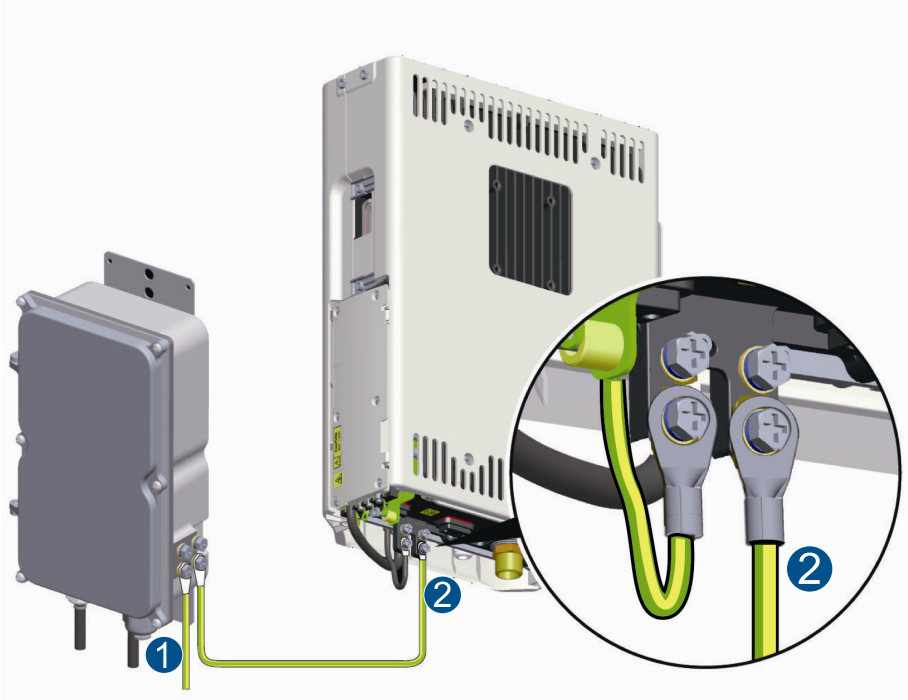
6. Close the cover of the surge protection box, and then tighten the screws. (You should tighten the screws in the order shown in the figure with the torque of 14 kg f•cm).



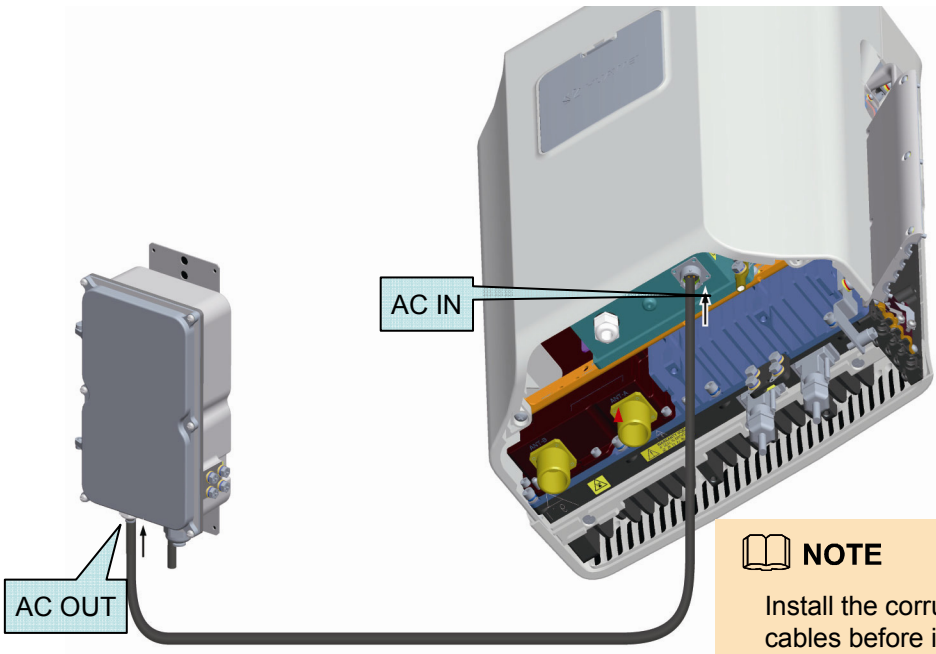
## c Installing the Surge Protection Box (for Outdoor Scenarios)

### 7. Connect the PGND cable.

1. Connect the external PGND cable between the surge protection box and the grounding point.
2. Connect the PGND cable between the surge protection box and the RRU.




### 8. Connect the power cable between the surge protection box and the RRU.

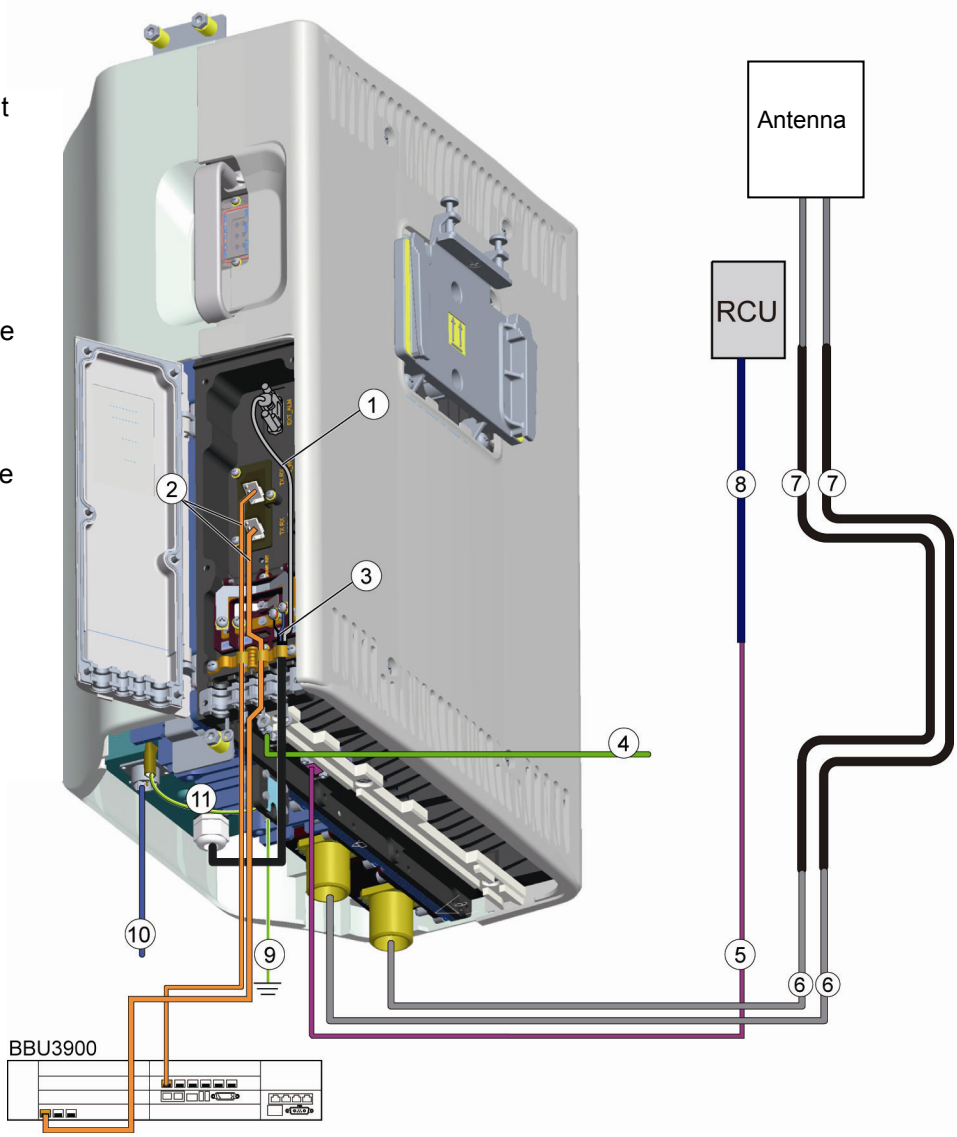



**NOTE**

Install the corrugated pipes for the AC power cables before installing the AC RRU power cables. For details, see page 36.

## d Cable Connections of a Single RRU

1. Boolean/RS485 input cable
2. CPRI optical cable
3. Power cable (DC)
4. Interconnect jumper
5. AISG multi-wire cable
6. RF jumper
7. Feeder
8. AISG extension cable
9. PGND cable
10. Power cable (AC)
11. Equipotential cable




**The alarm cable, DC power cable, equipotential cable between the power module and the RRU are installed before delivery.**

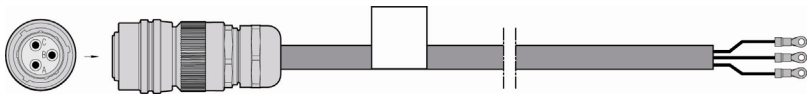
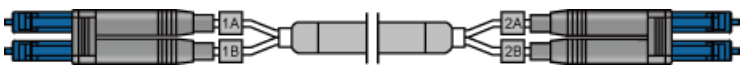
**Sequence of Installing the Cables**: PGND cable → RF jumper → Power cable (AC) → CPRI optical cable → the AISG multi-wire cable and extension cable ( optional )

## e Cable Connections of Multiple RRUs

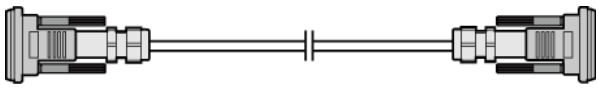
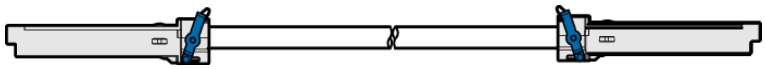
**NOTE**

The cable connections for multiple AC-powered RRU3908s and multiple DC-powered RRU3908s are the same. For details, see page 8.

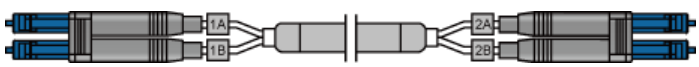
## f List of Cables (No Surge Protection Box Configured)

| Cable | Connector Type | Connected to… |
|---|---|---|
| PGND cable | OT terminal | Grounding bolt on the RRU |
| | OT terminal | Nearest grounding bar |
| | | |
| Equipotential cable | OT terminal | Grounding bolt on the RRU |
| | OT terminal | Grounding bolt on the power module |
| | | |
| RF jumper | DIN male connector | Ports labeled ANTA and ANTB on the RRU |
| | DIN male connector | Feeder or antenna |
| | | |
| External AC input power cable | Round connector | Port labeled AC_in on the RRU |
| | to be made depending on field requirements | External power supply |
| |  | |
| CPRI optical cable | DLC connector | Connect the fiber tails labeled 1A and 1B to the CPRI_W port on the RRU |
| | DLC connector | Connect the fiber tails labeled 2A and 2B to one of the CPRI0 to CPRI5 ports on the GTMU |
| |  | |
| AISG multi-wire cable | Waterproof DB9 connector | Port labeled RET/PWR_SRXU on the RRU |
| | Standard AISG female connector | Standard AISG male connector of the AISG extension cable or RCU |
| | | |

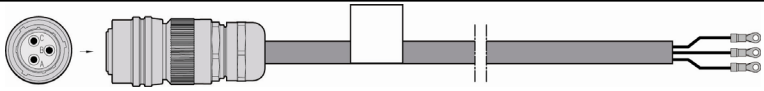
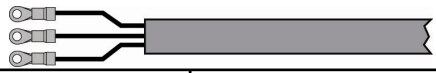
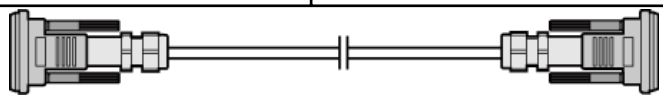
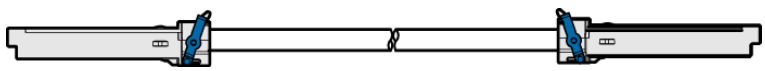
## f List of Cables (No Surge Protection Box Configured)

| Cable | Connector Type | Connected to… |
|---|---|---|
| AISG extension cable | Standard AISG male connector | Standard AISG female connector of the AISG multi-wire cable |
| | Standard AISG female connector | Standard AISG male connector of the RCU |
| | | |
| Interconnect jumper | 2W2 connector | Port labeled RX_IN/OUT on the RRU |
| | 2W2 connector | Port labeled RX_IN/OUT on the RRU |
| |  | |
| SFP high-speed cable for cascaded RRUs | SFP200 male connector | the CPRI_E port on the upper-level RRU |
| | SFP200 male connector | the CPRI_W port on the lower-level RRU |
| |  | |

## g List of Cables (Surge protection box Configured)

| Cable | Connector Type | Connected to… |
|---|---|---|
| Equipotential cable | OT terminal | Grounding bolt on the RRU |
| | OT terminal | Grounding bolt on the surge protection box |
| | | |
| PGND cable | OT terminal | Grounding bolt on the surge protection box |
| | OT terminal | Nearest grounding bar |
| | | |
| CPRI optical cable | DLC connector | Connect the fiber tails labeled 1A and 1B to the CPRI_W port on the RRU |
| | DLC connector | Connect the fiber tails labeled 2A and 2B to one of the CPRI0 to CPRI5 ports on the GTMU |
| |  | |

## g List of Cables (Surge protection box Configured)

| Cable | Connector Type | Connected to… |
|---|---|---|
| RF jumper | DIN male connector | Ports labeled ANT_TX/RXA and ANT_RXB on the RRU |
| | DIN male connector | Feeder or antenna |
| | | |
| Power cable between RRU and the surge protection box | Round connector | Port labeled AC IN on the RRU |
| | OT terminal | The Lout, Nout, and PE terminals on the surge protection box |
| |  | |
| External AC input power cable | OT terminal | The Lin, Nin, and PE terminals on the surge protection box |
| | To be made depending on field requirements | External power supply |
| |  | |
| AISG extension cable | Standard AISG male connector | Standard AISG female connector of the AISG multi-wire cable |
| | Standard AISG female connector | Standard AISG male connector of the RCU |
| | | |
| Interconnect jumper | 2W2 connector | Port labeled RX_IN/OUT on the upper-level RRU |
| | 2W2 connector | Port labeled RX_IN/OUT on the lower-level RRU |
| |  | |
| AISG multi-wire cable | Waterproof DB9 connector | Port labeled RET/PWR_SRXU on the RRU |
| | Standard AISG female connector | Standard AISG male connector of the AISG extension cable or RCU |
| | | |
| SFP high-speed cable for cascaded RRUs | SFP200 male connector | the CPRI_E port on the upper-level RRU |
| | SFP200 male connector | the CPRI_W port on the lower-level RRU |
| |  | |

# Installing the AC RRU3908

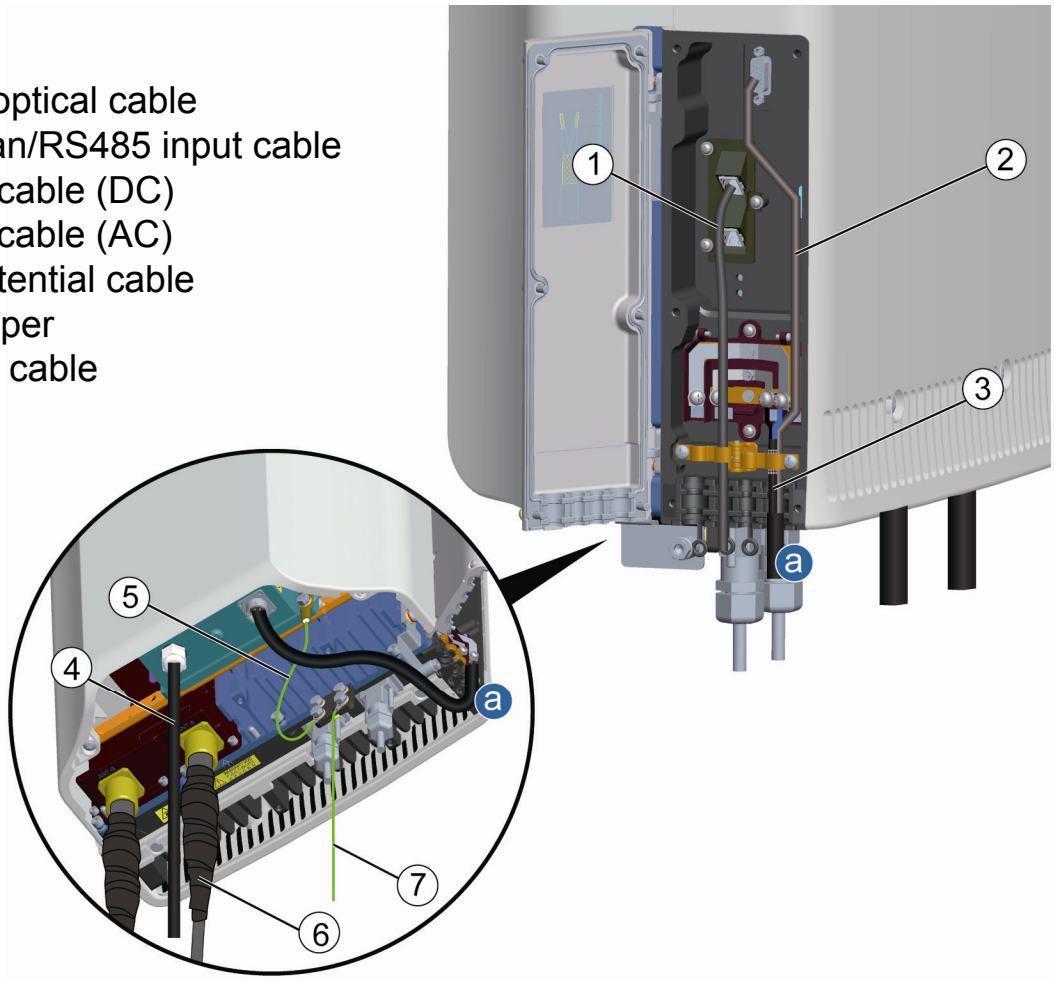
## h Installing the RRU Cables

**NOTE**

The cabling cavity of the AC RRU3908 is the same as that of the DC RRU3908.

The procedures for opening and closing the cover for the cabling cavity of the AC RRU3908 are the same as those for opening and closing the cover for the cabling cavity of the DC RRU3908.

① CPRI optical cable
② Boolean/RS485 input cable
③Power cable (DC)
④Power cable (AC)
⑤Equipotential cable
⑥RF jumper
⑦ PGND cable




**Cable Connections of RRU**

# Installing the AC RRU3908

## h Installing the RRU Cables

### for Outdoor Scenarios

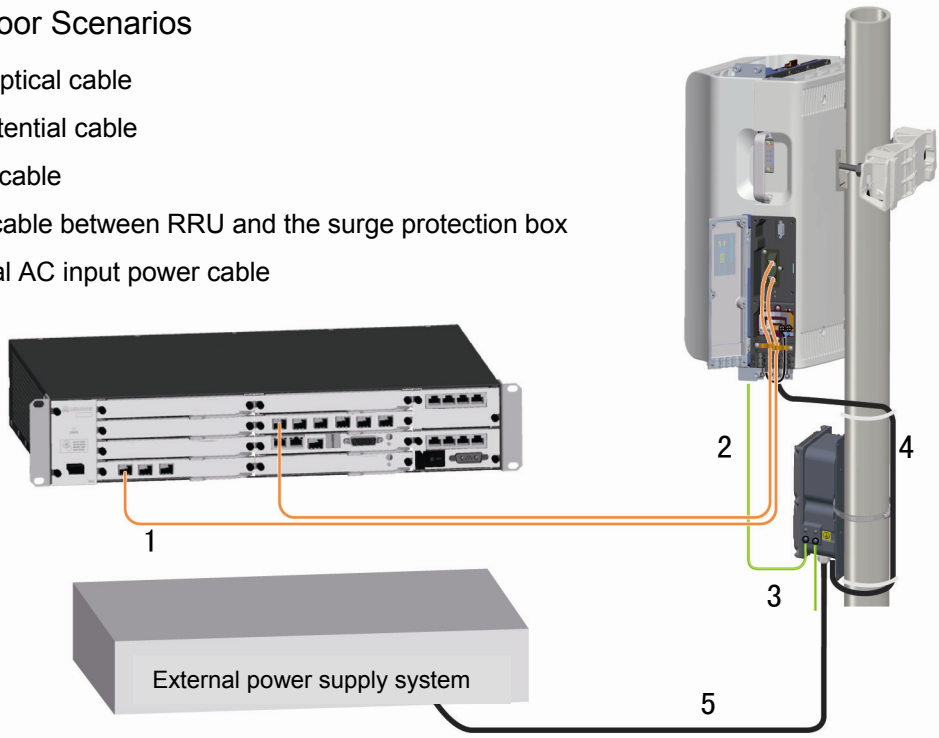
① CPRI optical cable

② Equipotential cable

③ PGND cable

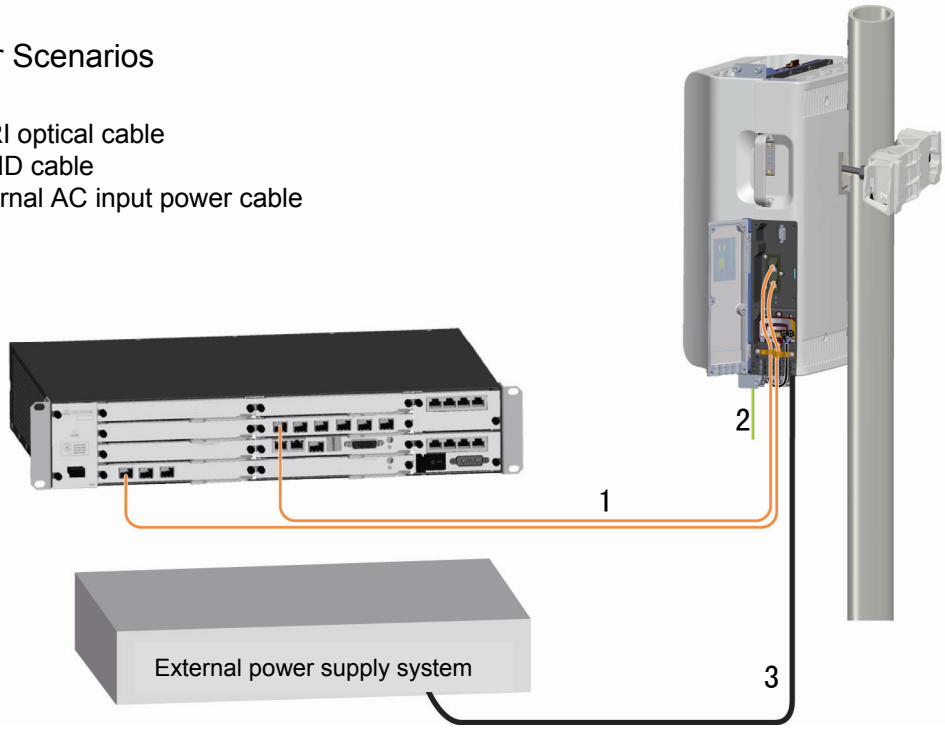
④Power cable between RRU and the surge protection box

⑤ External AC input power cable




### for Indoor Scenarios

① CPRI optical cable
② PGND cable
③ External AC input power cable



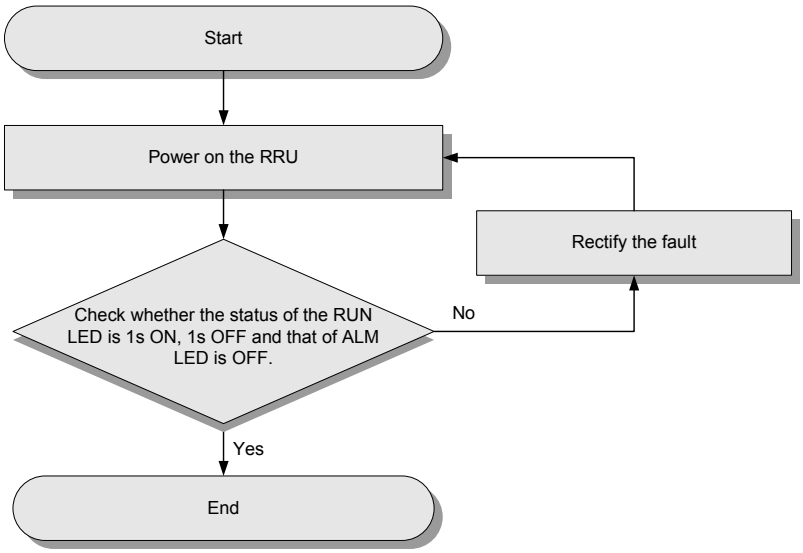

**NOTE**

The maximum length of the external AC input power cable is 70 m for the 110 V AC single-phase power cable and 100m for the 220 V AC single-phase power cable.

## Installation Checklist

| |
|---|
| 1. The PG connectors labeled IN and OUT on the surge protection box are securely installed and cannot be rotated with the cables. |
| 2. The waterproof gaskets on the door of the cabling cavity of the surge protection box are not stripped or broken. |
| 3. The OT terminals of the cables connected to the surge protection box are securely linked. The jackets of the cables are not damaged, and there are no uneven edges on the cables. |
| 4. The PG connectors are tightened, and the waterproof rings are secure. |
| 5. The six screws on the cabling cavity of the surge protection are tightened according to the required fastening torque. |
| 6. The axis for the door of the cabling cavity of the surge protection box is not broken, and the surface of the protection box is not scratched. |
| 7. The cables in the surge protection box are correctly connected by referring to the operation guide. The OT terminals are tight linked before the door of the cabling cavity is closed. |
| 8. The power supply to the surge protection box is cut off before installation and maintenance. |
| 9. The installation and maintenance of the surge protection box is not performed in rainy or damp weather. |

# Powering On the RRU



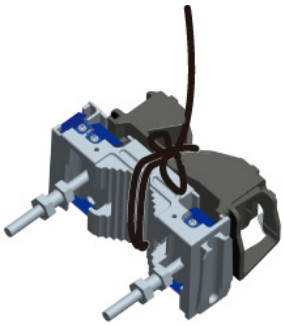

**CAUTION**

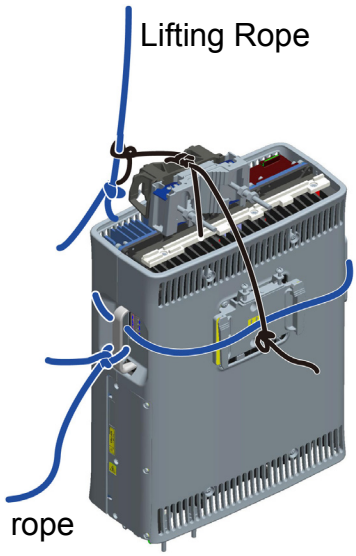
**When the RRU is unpacked, it must be powered on within 24 hours. Each time the RRU is maintained after being put into use, the power-off duration cannot exceed 24 hours.**

# Appendix

## a Binding the RRU and Installation Components

**1. Bind the RRU by leading the lifting rope along the lower part of the adapting piece and through the handle, bind the main and auxiliary brackets with the lifting rope, and then bind the steering rope with the handle of the RRU, as shown in the following figures.**





**DANGER**

Do not bind the lifting rope only on the handle when lifting the RRU.

**CAUTION**

**1. When lifting the RRU and installation components to the tower, prevent the RRU from colliding with the tower.**

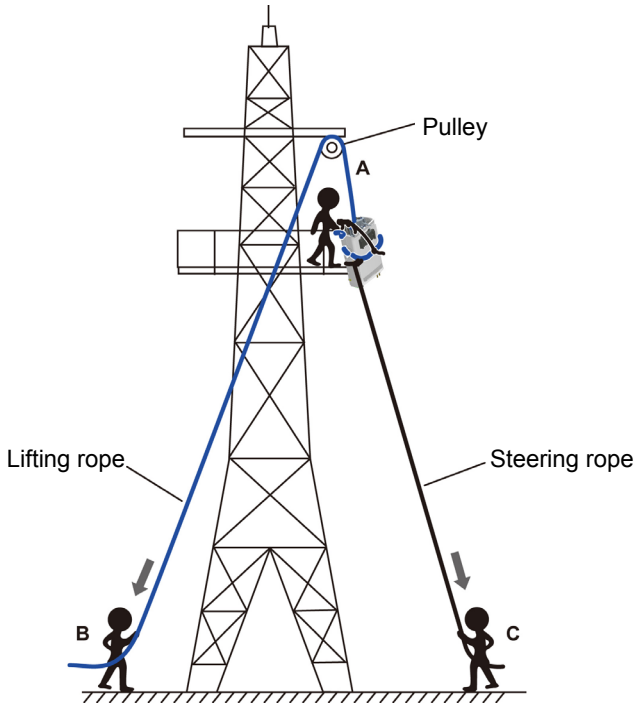
**2. The cross-sectional area of the lifting rope and steering rope is around 20 mm, not more than 25 mm. In addition, the ropes can bear the weight four times more than that of the RRU.**

# Appendix

## a Binding the RRU and Installation Components

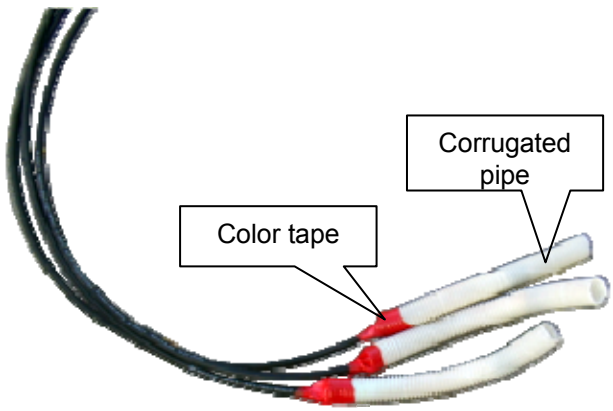
### 2. Lifting the RRU and Installation Components to the Tower

2.1. Installers A climb onto the tower. Then, installer A fixes the pulley to the support of the tower platform and leads the lifting rope through the pulley.
2.2. Installer C uses a lifting rope to bind the RRU and installation components as shown in the preceding figure and then tie a knot in the steering rope at the handle of the RRU.
2.3. Installer B pulls the lifting rope, and at the same time, installer C pulls the steering rope away from the tower to prevent the RRU and installation components from colliding with the tower.
2.4. Installers A hold the RRU and installation components and untie the ropes.




### 3. Lifting the CPRI Optical Cable up to the Tower

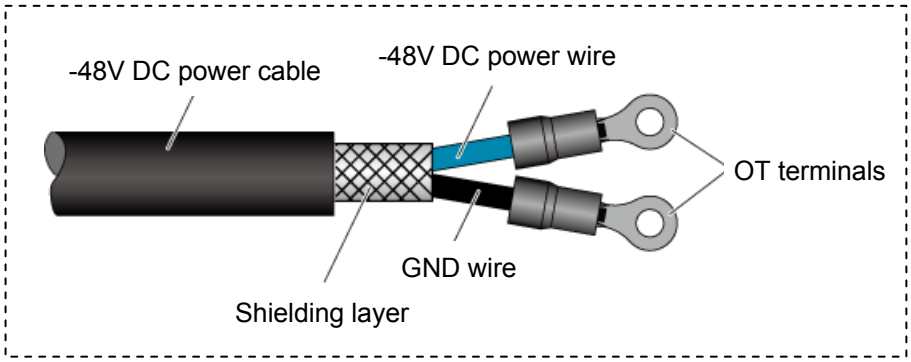
3.1. Cut off a 200 mm long corrugated pipe with the diameter of 25 mm.
3.2. Lead the fiber tails labeled 1A and 1B of the optical cable into the corrugated pipe by 160 mm.
3.3. Wrap up the corrugated pipe and optical cable with the color tape.
3.4. For the tower made of steel pipes, tie the black jacket to the corrugated pipe at the position 150 mm away from the color tape, and then lift the optical cable up to the tower.
3.5. For the tower made of angle steel girders, carry the optical cable onto the tower when climbing up to the tower.
3.6. After the optical cable is lifted up to the tower, remove the color tape and corrugated pipe before installing the optical cable.

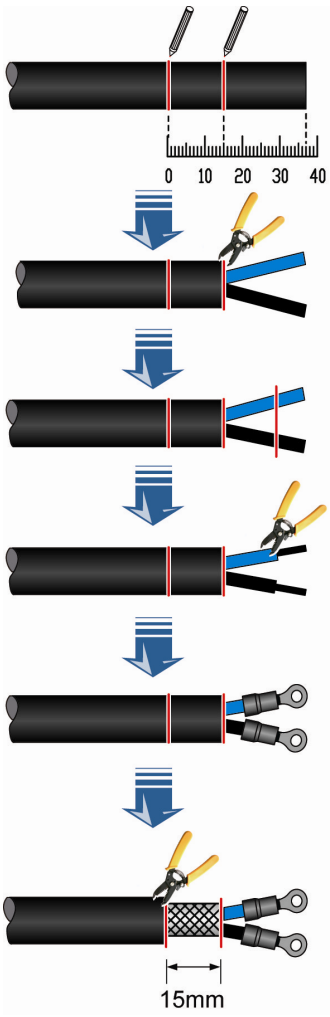


# Appendix

## b Making OT Terminals by Using a Cable Peeler (Recommended)

### Add two OT terminals to the end of the power cable connecting to the RRU.






Determine lengths of power cables for different operations according to the scales on the inner side of the cover plate of the cabling cavity.

Based on the determined length, remove the jacket and shielding layer off the power cable.

Remove the jacket from each wire.

Add an OT terminal to each wire.

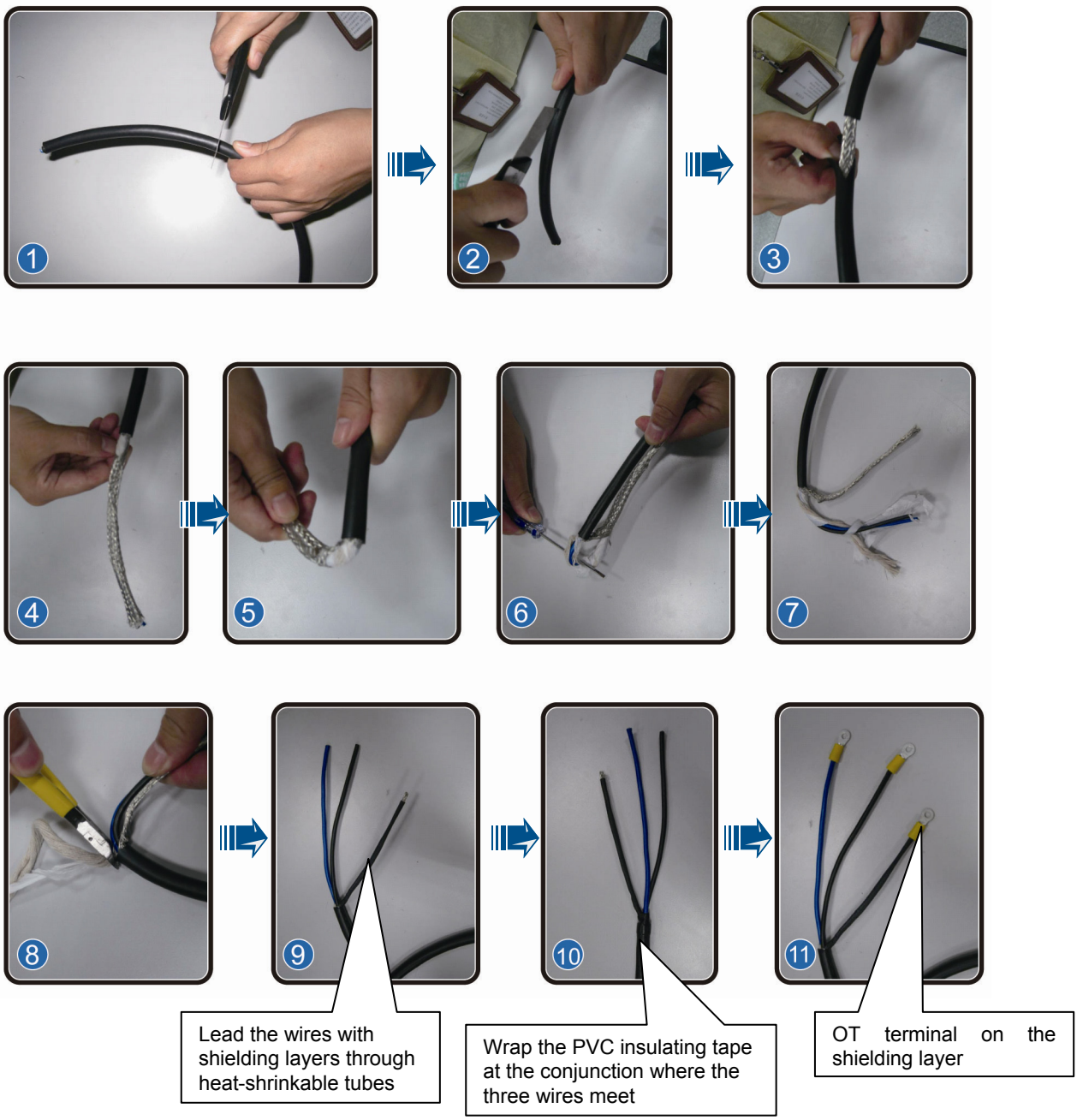
Strip a 15 mm jacket off the power cable to reveal the shielding layer of the power cable

**NOTE**

The assembling of OT terminals to the power cable must be complete before the RRU is installed on a metal pole.

# Appendix

## c Making OT Terminals at the Input End of the Power Cable by Using a Knife




**⚠ WARNING**

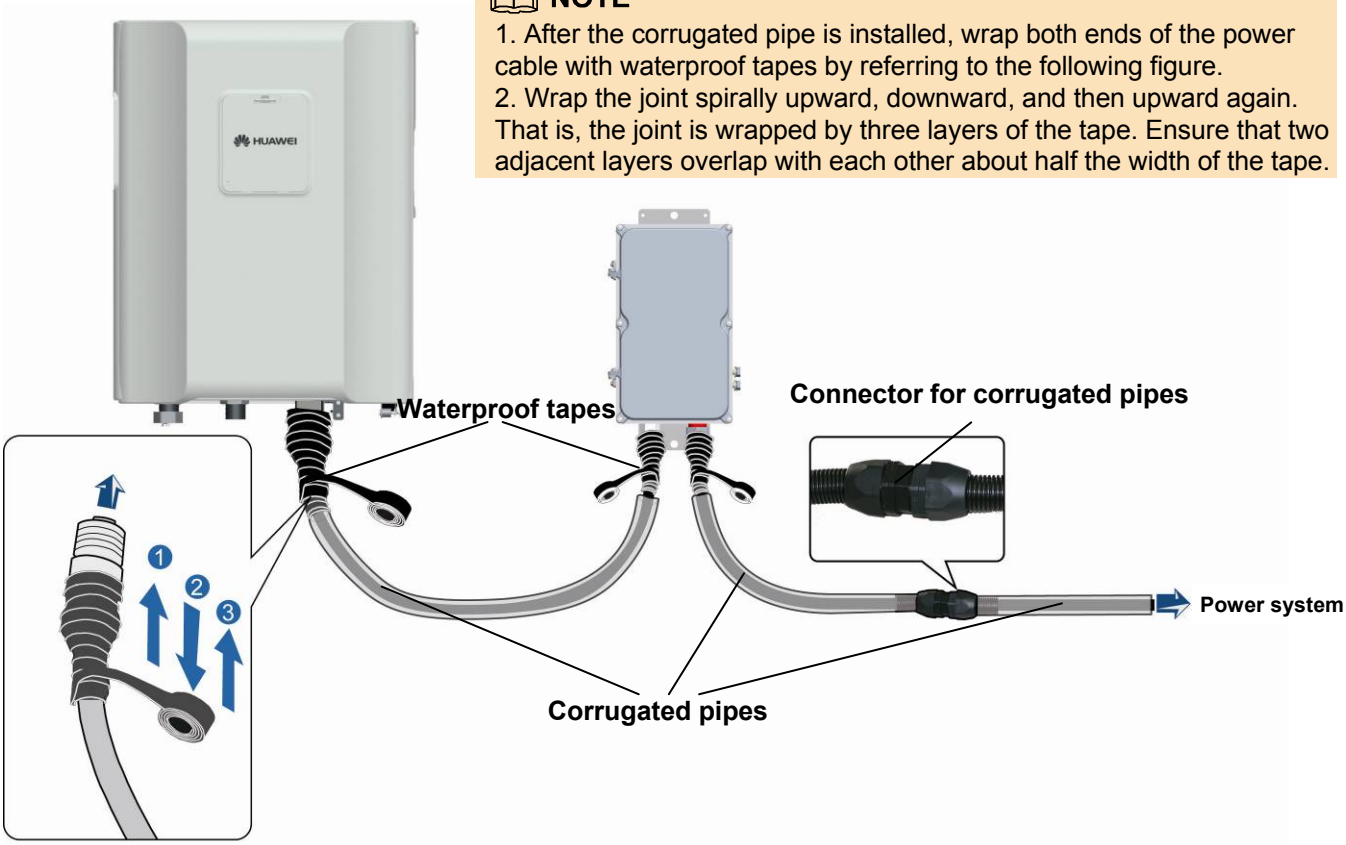
**Do not damage the shielding layer of the power cable when cutting around the jacket.**

# Appendix

## d Installing the corrugated pipes of AC power cable

**NOTE**

1. After the corrugated pipe is installed, wrap both ends of the power cable with waterproof tapes by referring to the following figure.
2. Wrap the joint spirally upward, downward, and then upward again. That is, the joint is wrapped by three layers of the tape. Ensure that two adjacent layers overlap with each other about half the width of the tape.




## e Pin Assignment for the Wires of the RRU Alarm Cable ( DC )

| DB15 connector | Signal name of DB15 connector | Cord End Terminal | Wire Color | Wire Type | Label |
|---|---|---|---|---|---|
| X1.2 | SWITCH_INPUT0+ | X2 | White/blue | Twisted pair | SWITCH_INPUT 0+ |
| X1.3 | GND | X3 | Blue | | GND |
| X1.6 | SWITCH_INPUT1+ | X4 | White/orange | Twisted pair | SWITCH_INPUT 1+ |
| X1.7 | GND | X5 | Orange | | GND |
| X1.10 | RX485_TX- | X6 | White/ green | Twisted pair | APM RX- |
| X1.11 | RX485_TX+ | X7 | Green | | APM RX+ |
| X1.13 | RX485_RX- | X8 | White/ brown | Twisted pair | APM TX- |
| X1.14 | RX485_RX+ | X9 | Brown | | APM TX+ |

# Changes in the RRU3908 Installation Guide

This page describes the changes in the *RRU3908 Installation Guide*.

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