

eAN3710A
V100R001C00
Hardware Installation Guide

Issue **01**
Date **2016-12-26**

Copyright © Huawei Technologies Co., Ltd. 2016. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions



HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: <http://www.huawei.com>

Email: support@huawei.com

1 eAN3710A Hardware Description

About This Chapter

Overview

This section describes the exterior, ports, indicators and cables of eAN3710A.

Product Version



NOTE

Unless otherwise stated, "eNodeB", "Pico", "eAN", and "AirNode" in this document refer to the 3710 series AirNode.

The 3710 series AirNode is a base station that provides communications services in Huawei eLTE-IoT solution. The following table lists the product name and product version related to the 3710 series AirNode.

| Product Name | Product Version |
|--------------|-----------------|
| eAN3710A | V100R001C00 |

Intended Audience

This document is intended for:

- Installation engineers
- Site maintenance engineers
- System engineers

Organization

[1.1 eAN3710A Equipment](#)

This section describes the exterior, ports and indicators of eAN3710A.

[1.2 Auxiliary Devices](#)

The PSE or Dock supplies power to a eAN3710A through an Ethernet cable in PoE mode.

1.3 Mounting Kits

This section describes the mounting brackets for installing a eAN3710A.

1.4 Cables

This section describes eAN3710A cables.

1.1 eAN3710A Equipment

This section describes the exterior, ports and indicators of eAN3710A.

1.1.1 eAN3710A Exterior

This section describes the exterior and dimensions of a eAN3710A.

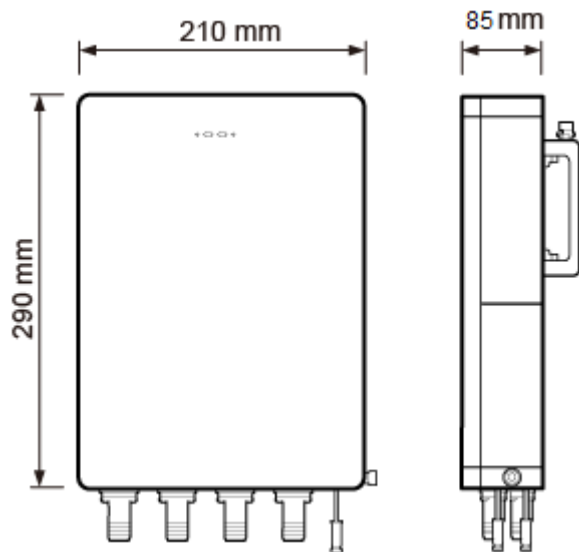
[Figure 1-1](#) shows the exteriors of the eAN3710A.

Figure 1-1 eAN3710A exterior



[Figure 1-2](#) shows the dimensions of eAN3710A.

Figure 1-2 eAN3710A dimensions



1.1.2 eAN3710A Ports

This section describes ports on the eAN3710A panels. An eAN3710A has a bottom panel, and cabling cavity panel.

Figure 1-3 shows the ports on the eAN3710A panels.

Figure 1-3 Ports on the eAN3710A panels

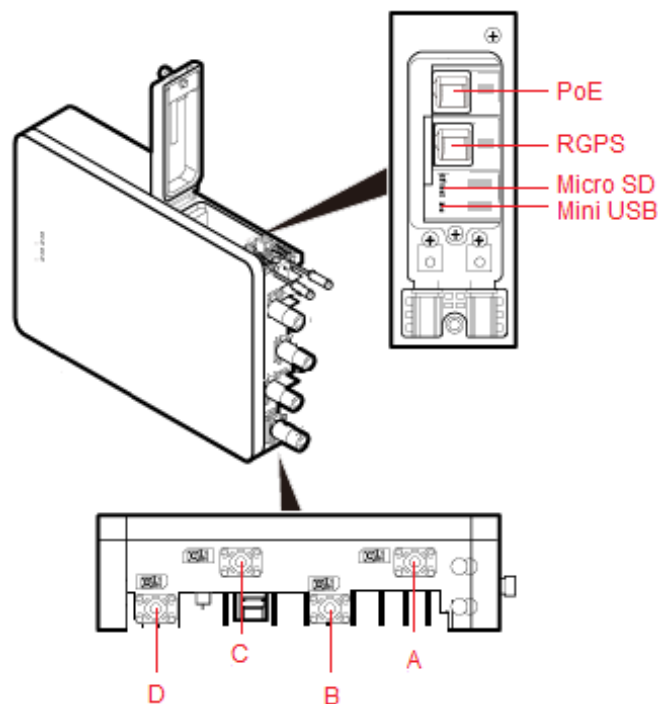


Table 1-1 describes ports on the eAN3710A cabling cavity panels.

Table 1-1 Ports on the eAN3710A cabling cavity panels

| Port/Slot | Description |
|-----------|--|
| PoE | Used for power supply and data transmission. |
| RGPS | Used for clock synchronization. |
| Micro SD | Used for housing a micro SD card. This slot is used in the case of deployment. |
| Mini USB | Used for testing a port. |

There are four RF ports on an eAN3710A bottom panel, [Table 1-2](#) lists the TX/RX frequency band supported by the RF ports.

Table 1-2 TX/RX frequency band supported by the RF ports

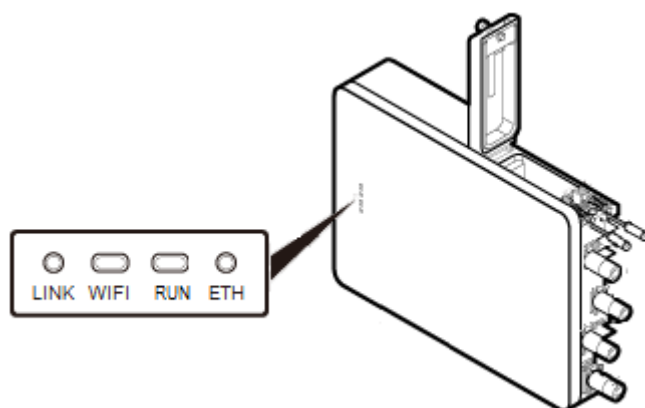
| RF ports | TX/RX frequency band |
|----------|------------------------------------|
| A | 863 MHz to 870 MHz (Europe) |
| B | 902 MHz to 928 MHz (Latin America) |
| C | 470 MHz to 510 MHz (China) |
| D | |

1.1.3 eAN3710A Indicators

This section describes the eAN3710A indicators.

[Figure 1-4](#) shows the position of the eAN3710A indicators.

Figure 1-4 Position of the eAN3710A indicators



[Table 1-3](#) describes the eAN3710A indicators.

Table 1-3 eAN3710A indicators

| Indicators | Description |
|------------|---------------------------------|
| LINK | Link status |
| WIFI | Wi-Fi processing unit status |
| RUN | Cellular processing unit status |
| ETH | ETH status |

1.2 Auxiliary Devices

The PSE or Dock supplies power to a eAN3710A through an Ethernet cable in PoE mode.

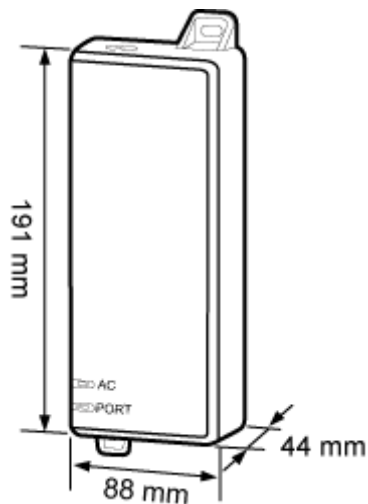
1.2.1 PSE

This section describes the appearance, dimensions, ports, and indicators of the PSE, and the PSE specifications.

Appearance and Dimensions

Figure 1-5 shows the appearance and dimensions of the PSE.

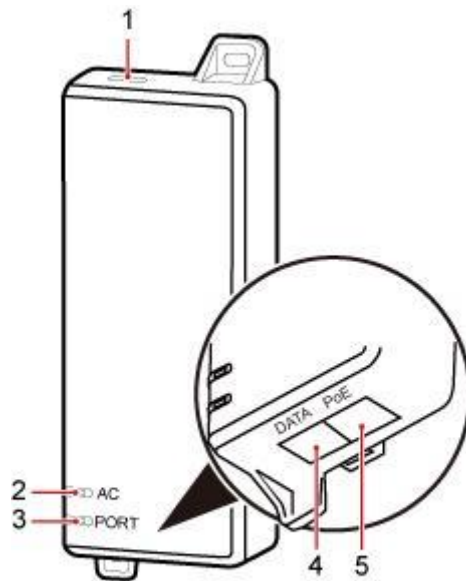
Figure 1-5 Appearance and dimensions of the PSE



Ports and Indicators

Figure 1-6 shows the ports and indicators on the PSE.

Figure 1-6 PSE ports and indicators



PAP08C0011

Table 1-4 describes PSE ports.

Table 1-4 PSE ports

| No. | Label | Meaning |
|-----|-------|---|
| 1 | - | Power supply port used for PSE power supply |
| 4 | DATA | Data input port connecting to a transmission device |
| 5 | PoE | PoE output port connecting to the eAN3710A |

Table 1-5 describes PSE indicators.

Table 1-5 PSE indicators

| No. | Label | Status | Description |
|-----|-------|--------------|---|
| 2 | AC | Steady green | The power supply is normal. |
| | | Steady off | There is no power input or the PSE is faulty. |
| 3 | PORT | Steady green | The connection to the eAN3710A is |

| No. | Label | Status | Description |
|-----|-------|------------|--|
| | | | normal. |
| | | Steady off | The connection to the eAN3710A is abnormal or the PSE is faulty. |

Specifications

Table 1-6 lists PSE specifications.

Table 1-6 PSE specifications

| Item | Specifications |
|-------------------------|---------------------|
| Input voltage | 90 V AC to 264 V AC |
| Input voltage frequency | 47 Hz to 63 Hz |
| Output voltage | 56 V DC |

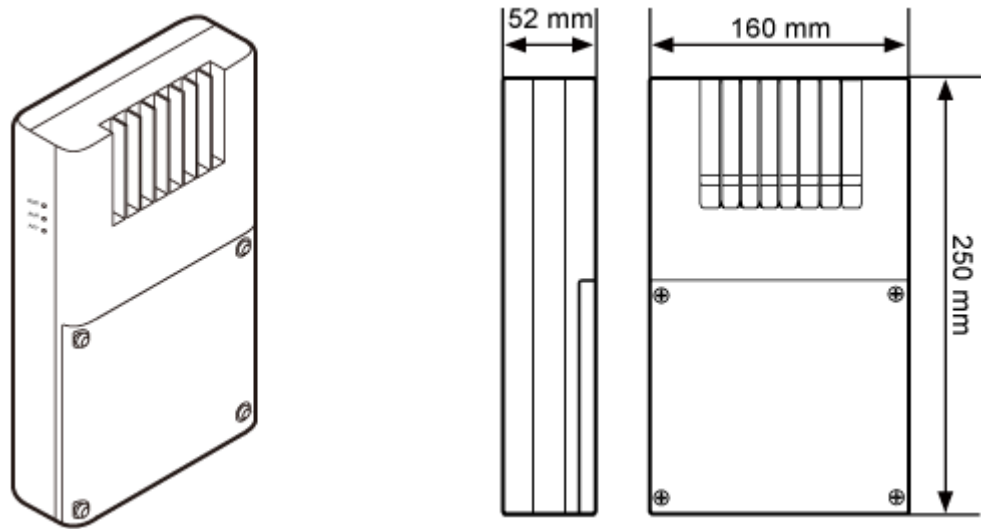
1.2.2 Dock

The Dock supplies power and transfer transmission to a eAN3710A through an Ethernet cable in PoE mode.

Exterior

The Dock uses the modular structure. Figure 1-7 shows the exterior and dimensions of a Dock.

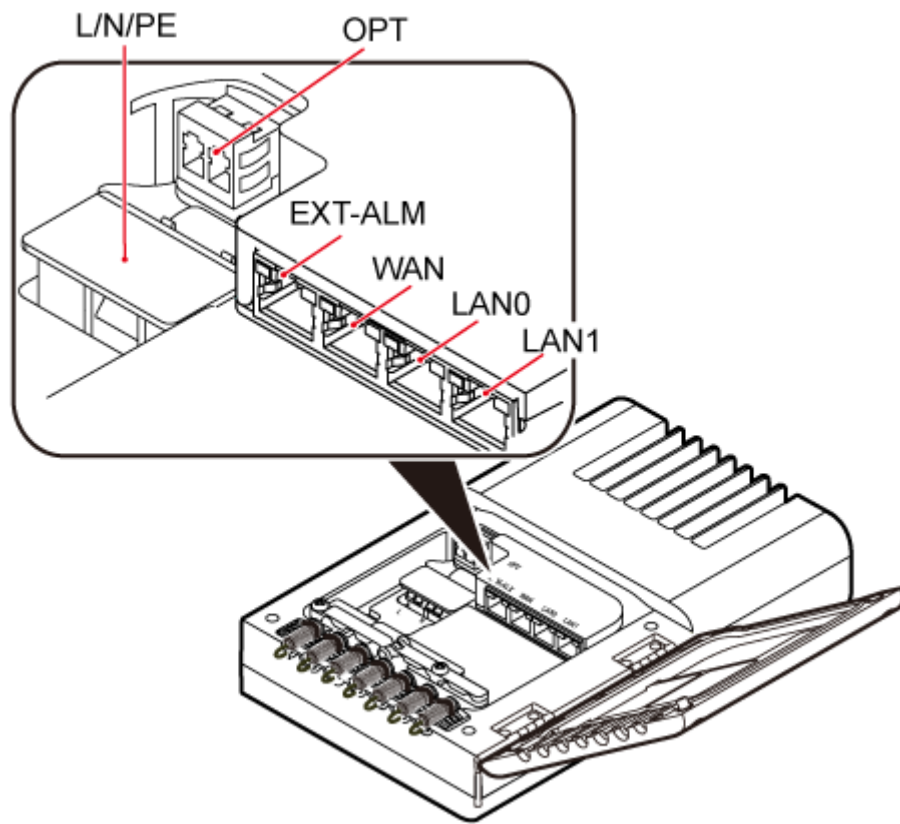
Figure 1-7 Exterior and dimensions of a Dock



Ports

The ports are inside the Dock. [Figure 1-8](#) shows the positions of ports on the Dock.

Figure 1-8 Ports on the Dock



PAP07C0007

Table 1-7 describes ports on the Dock.

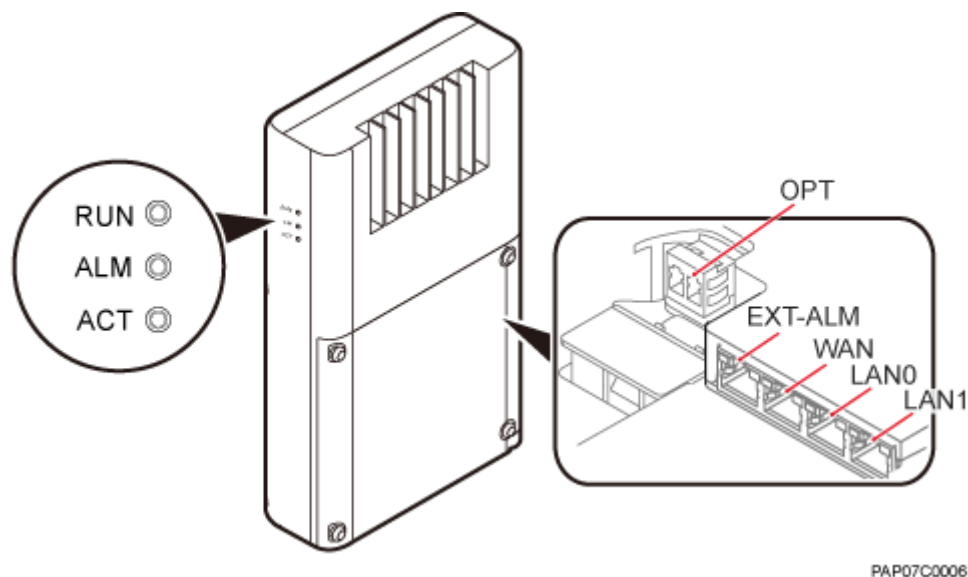
Table 1-7 Meanings of ports on the Dock

| Label | Description |
|---------|--|
| OPT | FE/GE optical port, used for connecting an external transmission devices. |
| L/N/PE | AC power port, used for connecting an external power supply device. |
| EXT-ALM | Environment monitoring port that provides four dry contacts, used for connecting external devices and monitoring alarms. |
| WAN | P&E transmission and power supply port, used for connecting an external transmission device. |
| LAN0 | P&E transmission and power supply port, used for connecting a BTS3205E. A Dock supplies power to only one eAN3710A. |
| LAN1 | P&E transmission and power supply port. Used to connect to commissioning devices, backhaul devices, or cascaded devices. |

Indicators

The Dock has three external indicators: RUN, ALM, and ACT. The internal RJ45 connector has two indicators showing the connection status and data transmission status respectively. The internal OPT connector has one indicator showing the connection status and data transmission status. Figure 1-9 shows positions of external indicators on the Dock.

Figure 1-9 Positions of external indicators on the Dock



PAP07C0006

Table 1-8 describe indicators on the Dock external indicators.

Table 1-8 Dock external indicators

| Indicator | Meaning |
|-----------|------------------|
| RUN | Operating status |
| ALM | Alarm status |
| ACT | Service status |

Table 1-9 describe indicators on the Dock internal indicators.

Table 1-9 Internal indicators on the Dock

| Indicator | Meaning |
|---------------|--|
| WAN/LAN0/LAN1 | Green indicator: connection status Orange indicator: Data transmission |
| OPT | Optical status Steady green: normal connection, no data transmission. Fast blinking green (0.125s interval): in the process of data transmission. Off: faulty connection. |

1.3 Mounting Kits

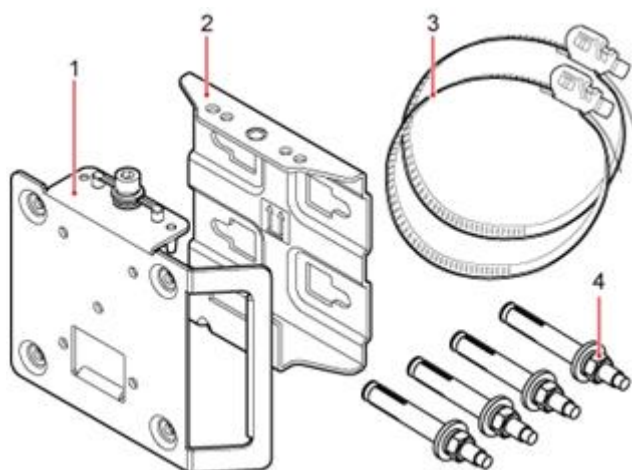
This section describes the mounting brackets for installing a eAN3710A.

1.3.1 eAN3710A Mounting Kits

This section describes mounting kits and attachment plates for installing eAN3710A.

[Figure 1-10](#) shows a mounting bracket and a attachment plate.

Figure 1-10 Mounting bracket and common attachment plate for eAN3710A



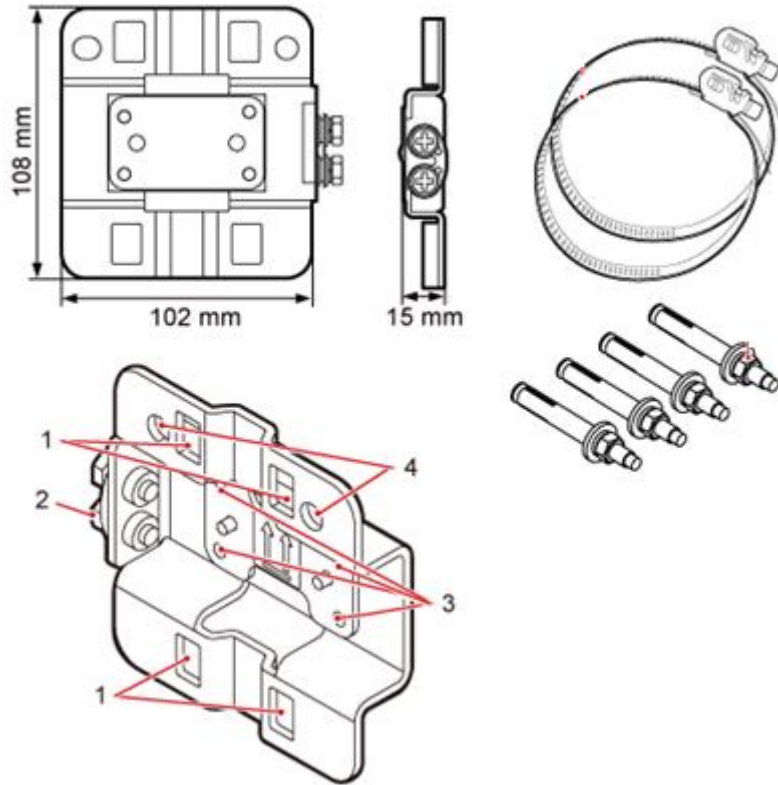
| | | | |
|----------------------|----------------------|----------------|--------------------|
| (1) Attachment plate | (2) Mounting bracket | (3) Hose clamp | (4) Expansion bolt |
|----------------------|----------------------|----------------|--------------------|

1.3.2 Dock Mounting Kits

This section describes the mounting brackets for installing a Dock.

[Figure 1-11](#) shows a separate Dock mounting bracket.

Figure 1-11 Appearance of a separate Dock mounting bracket



| | | | |
|-----------------------------------|---------------------|------------------------------|--|
| (1) Hole for routing a hose clamp | (2) Ground terminal | (3) Hole for a captive screw | (4) Hole for inserting an expansion bolt |
|-----------------------------------|---------------------|------------------------------|--|

1.4 Cables

This section describes eAN3710A cables.

1.4.1 Cable List

This section describes eAN3710A cable connections.

[Table 1-10](#) lists eAN3710A cables.

Table 1-10 List of eAN3710A cables

| Cable | One End | | The Other End | |
|--------------------------------------|----------------|-------------------|----------------|--|
| | Connector | Connected to ... | Connector | Connected to ... |
| 1.4.2 Ethernet Cable | RJ45 connector | eAN3710A/PoE port | RJ45 connector | If connected to PSE/DATA port If connected to |

| Cable | One End | | The Other End | |
|-------------------------|-----------------------|--|--|-----------------------------------|
| | Connector | Connected to ... | Connector | Connected to ... |
| | | | | Dock/LAN0 port |
| 1.4.3 PGND cable | OT terminal (M6) | Ground terminal on the eAN3710A | OT terminal (M8) | Ground terminal on the ground bar |
| | OT terminal (M6) | Ground terminal on the Dock | OT terminal (M8) | Ground terminal on the ground bar |
| 1.4.4 RF Jumper | Type N male connector | External antenna TX/RX RF port on eAN3710A | Based on the port model of the antenna system. | Antenna system |
| 1.4.5 RGPS Signal Cable | RJ45 connector | eAN3710A/RG PS port | Round 12-pin connector | RGPS device |

1.4.2 Ethernet Cable

This section describes the appearance, pin assignment, and installation position for an Ethernet cable connecting an auxiliary devices and a eAN3710A.

NOTE

- The Ethernet cable must be of Category 5e (enhanced) or higher. In addition, its cross-sectional area must be 24 AWG or larger and frame spread rating must be CM or higher.
- With the internal PoE module providing power, the maximum length of an Ethernet cable is 100 m.
- Both the cable and the RJ45 connectors are delivered, and they must be assembled onsite.

Both ends of the Ethernet cable are RJ45 connector, as shown in [Figure 1-12](#).

Figure 1-12 Ethernet cable exterior



(1) RJ45 connector

Table 1-11 shows the pin assignment for wires of the Ethernet cable.

Table 1-11 Pin assignment for wires of the Ethernet cable

| Pin of the RJ45 Connector | Color | Core Wire | Pin of the RJ45 Connector |
|---------------------------|--------------|--------------------|---------------------------|
| X1.2 | Orange | Twisted pair cable | X2.2 |
| X1.1 | White/Orange | | X2.1 |
| X1.6 | Green | Twisted pair cable | X2.6 |
| X1.3 | White/green | | X2.3 |
| X1.4 | Blue | Twisted pair cable | X2.4 |
| X1.5 | White/Blue | | X2.5 |
| X1.8 | Brown | Twisted pair cable | X2.8 |
| X1.7 | White/brown | | X2.7 |

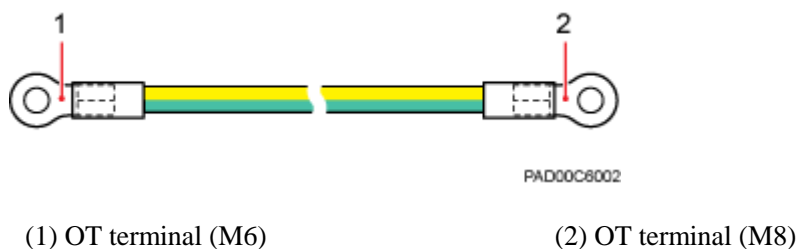
1.4.3 PGND cable

An eAN3710A PGND cable connects an eAN3710A and a ground bar, Dock and a ground bar ensuring the proper grounding of the eAN3710A and Dock. The maximum length of an eAN3710A PGND cable is 8 m (26.25 ft).

Exterior

The yellow and green or green PGND cable is a single cable. The cross-sectional area of the PGND cable is 6 mm² (0.009 in.²). Both ends of the cable are OT terminals, as shown in Figure 1-13.

Figure 1-13 Exterior of a PGND cable



NOTE

- If the PGND cable is provided by the customer, a copper-core cable with a minimum cross-sectional area of 6 mm² (0.009 in.²) or 10 AWG is recommended.
- The OT terminals at both ends of the PGND cable are assembled at the site.
- The M6 OT terminal has the default size. You can replace it with another OT terminal of the expected size based on the site requirement.

Installation Position

The M6 OT terminal of the PGND cable is connected to the ground screw on the eAN3710A and Dock, and the M8 OT terminal of the PGND cable is connected to the ground bar at the site.

1.4.4 RF Jumper

The eAN3710A RF jumper transmits and receives RF signals.

 **NOTE**

If the customer prepares the RF jumper, the length of the RF jumper should be as short as possible and not exceed 2 m (6.56 ft.).

Both end of the outdoor RF jumper is the type N male connector. [Figure 1-14](#) shows the RF jumper.

Figure 1-14 RF jumper



(1) Type N male connector

1.4.5 RGPS Signal Cable

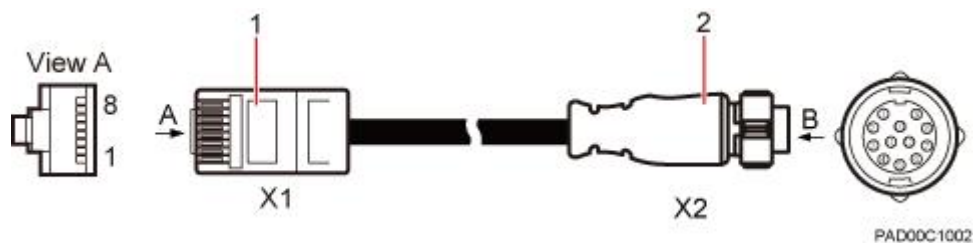
The RGPS signal cable between the eAN3710A and RGPS device is used for clock synchronization. This cable is optional for the eAN3710A.

 **NOTE**

If the customer uses their own radio frequency (RF) jumpers, it is recommended that the length of RF jumpers be 2 m.

An RGPS signal cable has an RJ45 connector at one end and a round 12-pin connector at the other end, as shown in [Figure 1-15](#).

Figure 1-15 Appearance of an RGPS signal cable



(1) RJ45 connector

(2) Round 12-pin connector

2 eAN3710A Hardware Installation Guide

About This Chapter

Overview

This document describes the process of installing eAN3710A.

Product Version



NOTE

Unless otherwise stated, "eNodeB", "Pico", "eAN", and "AirNode" in this document refer to the 3710 series AirNode.

The 3710 series AirNode is a base station that provides communications services in Huawei eLTE-IoT solution. The following table lists the product name and product version related to the 3710 series AirNode.

| Product Name | Product Version |
|--------------|-----------------|
| eAN3710A | V100R001C00 |

Intended Audience

This document is intended for installation engineers.

Organization

[2.1 Installation Preparations](#)

Before starting the installation, you must obtain the required reference documents, tools, and instruments, and familiarize yourself with the skills required.

[2.2 Information About the Installation](#)

This section describes the information that you must be familiar with before installing a eAN3710A, including the eAN3710A hardware information, installation scenarios, installation space and environment requirements.

[2.3 Unpacking the Equipment](#)

This section describes how to unpack and check the delivered equipment to ensure that all the materials are included and intact.

[2.4 Installation Process](#)

This section describes the eAN3710A installation process.

[2.5 Obtaining the ESN](#)

Before installing the eAN3710A, record its electronic serial number (ESN) for future use during commissioning.

[2.6 \(Optional\) Installing a Micro SD Card](#)

This section describes how to install a micro SD card in the eAN3710A.

[2.7 Installing the eAN3710A](#)

This section describes the eAN3710A installation process.

[2.8 Installing the Auxiliary Devices](#)

This section describes the procedure and precautions for installing the auxiliary devices.

[2.9 Installing eAN3710A Cables](#)

This section describes the procedures for installing eAN3710A cables and auxiliary devices cables.

[2.10 Checking the eAN3710A Hardware Installation](#)

eAN3710A hardware installation checking includes hardware and cable installation checking.

[2.11 Power-On Check on the eAN3710A](#)

This section describes the procedure for performing a power-on check on the eAN3710A.

[2.12 Appendix](#)

This section describes reference information during installation.

2.1 Installation Preparations

Before starting the installation, you must obtain the required reference documents, tools, and instruments, and familiarize yourself with the skills required.

2.1.1 Reference Documents

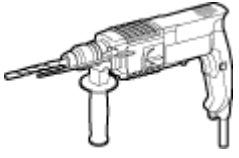
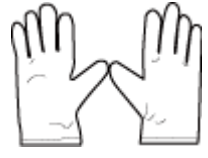





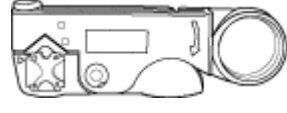
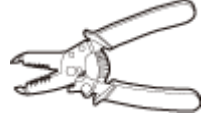
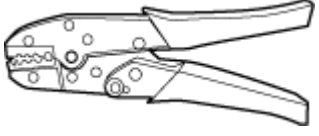
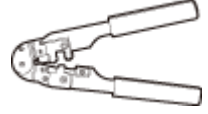











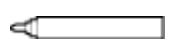
Before the installation, you must be familiar with reference documents.

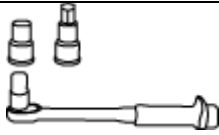

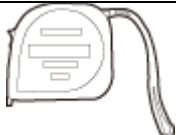



The following reference documents are required during eAN3710A installation:

- *Health and Safety*
- *Equipment Safety*
- [1 eAN3710A Hardware Description](#)

2.1.2 Tools and Instruments

You must prepare the following tools and instruments before the installation.

| | | |
|---|--|---|
| <p>Hammer drill (a $\phi 12$ bit)</p>  | <p>ESD gloves</p>  | <p>Vacuum cleaner</p>  |
| <p>Heat gun</p>  | <p>Phillips screwdriver (M3 to M6)</p>  | <p>Flat-head screwdriver (M3 to M6)</p>  |
| <p>Rubber mallet</p>  | <p>COAX crimping tool</p>  | <p>Wire stripper</p>  |
| <p>Power cable crimping tool</p>  | <p>RJ45 crimping tool</p>  | <p>Diagonal plier</p>  |
| <p>Utility knife</p>  | <p>Level</p>  | <p>Network cable tester</p>  |
| <p>Adjustable wrench (size ≥ 32 mm [1.26 in.])</p>  <p>Torque wrench</p>  <p>Size: 16 mm (0.63 in.) and 22 mm (0.87 in.)</p> <p>Combination wrench</p>  <p>Size: 16 mm (0.63 in.) and 22 mm (0.87 in.)</p> | <p>Torque screwdriver</p>   <p>3mm or 5mm</p>  <p>(M3 to M6)</p>  <p>(M3 to M6)</p> | <p>Marker (diameter ≤ 10 mm [0.39 in.])</p>  |
| <p>Torque socket (M6 or M10)</p> | <p>Multimeter</p> | <p>Measuring tape</p> |

| | | |
|--|---|---|
|  |  |  |
| Fixed pulley(weight-bearing capacity > 500 kg or 1102.5 lb)  | Lifting sling  | Ladder  |

2.1.3 Requirements for Installation Personnel

This section describes requirements for installation engineers. They must be qualified and trained, and familiar with correct operation methods and safety precautions before performing any operations.

Before the installation, pay attention to the following items:

- Technical engineers must take Huawei training and be familiar with proper installation and operation methods.
- The number of installation personnel depends on the engineering schedule and installation environment. Generally, two to three persons are required. Generally, only three to five onsite personnel are necessary.

2.2 Information About the Installation

This section describes the information that you must be familiar with before installing a eAN3710A, including the eAN3710A hardware information, installation scenarios, installation space and environment requirements.

2.2.1 Hardware Device Information

This section describes the hardware information you should know before installing the eAN3710A.

eAN3710A hardware includes eAN3710A main equipment, auxiliary devices, mounting kits, and cables. For details, see sections in *eAN3710A Hardware Description*, which are listed in [Table 2-1](#).

Table 2-1 Hardware information

| Category | Sections in <i>eAN3710A Hardware Description</i> |
|-------------------------|--|
| eAN3710A main equipment | 1.1.1 eAN3710A Exterior |
| | 1.1.2 eAN3710A Ports |

| Category | Sections in <i>eAN3710A Hardware Description</i> |
|------------------|--|
| | 1.1.3 eAN3710A Indicators |
| Auxiliary device | 1.2.1 PSE |
| | 1.2.2 Dock |
| Mounting kits | 1.3.1 eAN3710A Mounting Kits |
| | 1.3.2 Dock Mounting Kits |
| Cables | 1.4.1 Cable List |

2.2.2 Installation Options and Restrictions

The eAN3710A can be installed on a wall or pole. Installation scenarios must meet heat-dissipation and waterproofing requirements of the eAN3710A.

Installation on a Pole

[Figure 2-1](#) shows the diameter of a pole for installing an eAN3710A.

Figure 2-1 Diameter of a pole for installing a eAN3710A

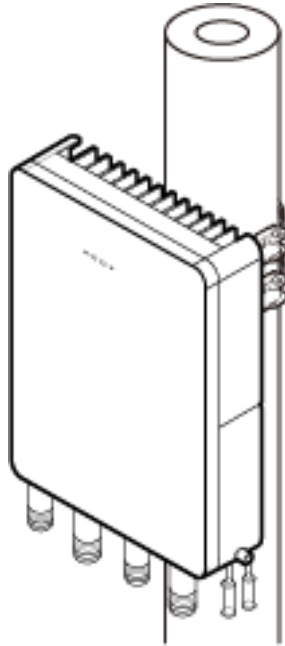


NOTICE

- The diameter of a pole for installing a eAN3710A ranges from 48 mm (1.89 in.) to 114 mm (4.49 in.). The recommended diameter is 60 mm (2.36 in.).
- The recommended thickness of the pole wall is 3.5 mm (0.14 in.) or above.

[Figure 2-2](#) shows the eAN3710A installed on a pole.

Figure 2-2 A eAN3710A installed on a pole



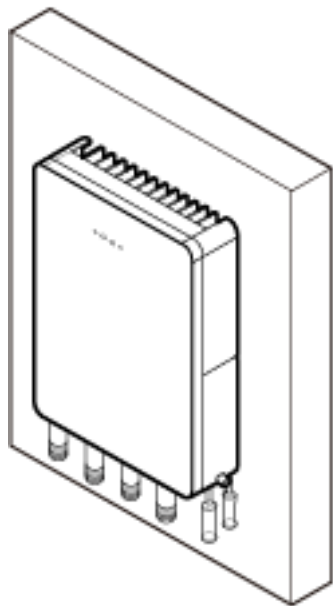
Installation on a Wall

The wall for installing eAN3710A must meet the following requirements:

- The wall can bear a load at least four times the weight of a eAN3710A.
- The screws must be tightened with a torque of 30 N·m. This ensures the screws work properly and the wall remains intact without cracks in it.

[Figure 2-3](#) shows the eAN3710A installed on a pole.

Figure 2-3 A eAN3710A installed on a wall



2.2.3 Installation Clearance and Space Requirements

This section describes the recommended and minimum clearances for a eAN3710A.

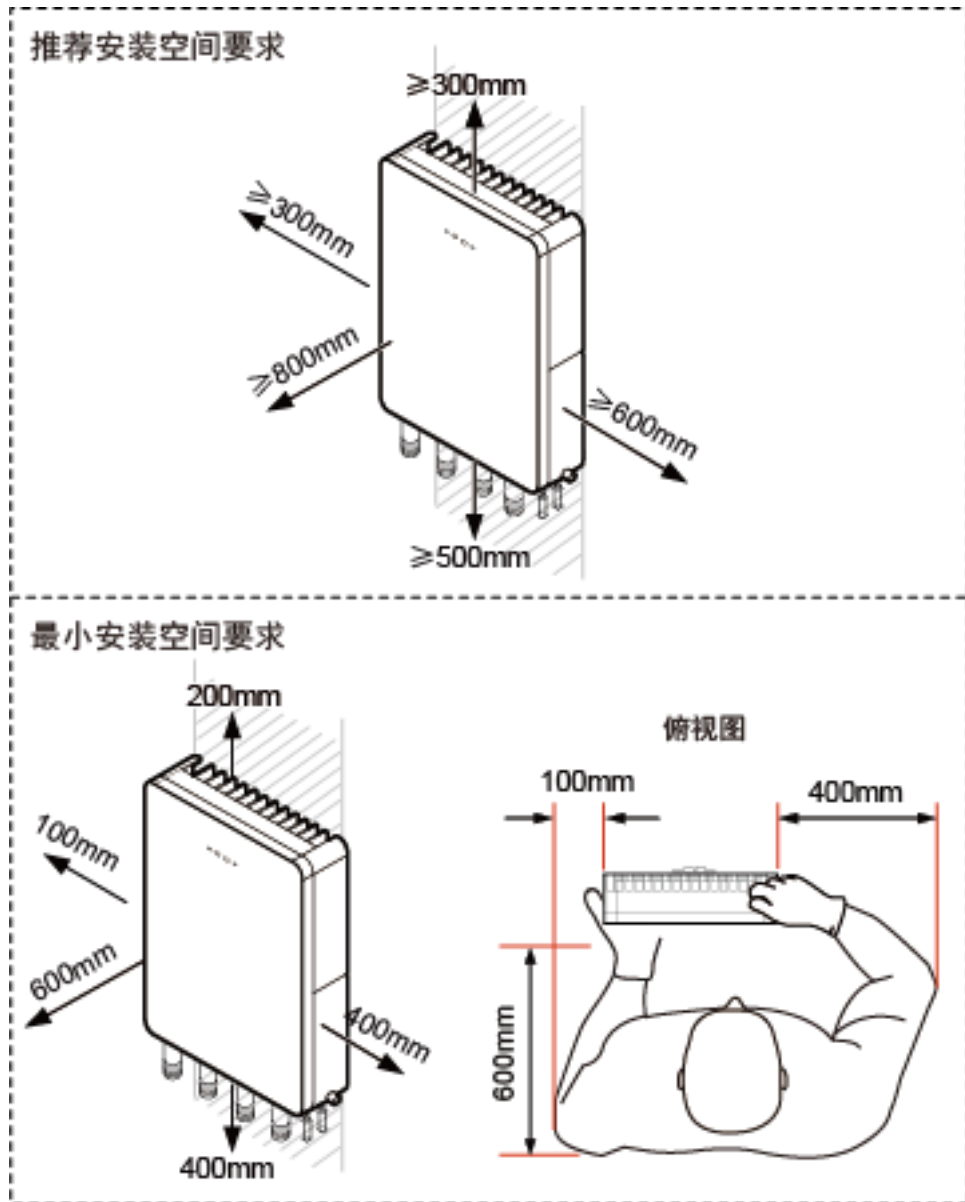
Clearance for a eAN3710A

When the eAN3710A is installed on a wall or pole, the minimum clearance is required for easy cabling and operation and maintenance (O&M). Based on the engineering practice, the recommendation for the installation clearance is provided.

- The recommended clearances are for customers, ensuring normal running and providing appropriate space for O&M. If installation space is sufficient, leave the recommended clearances after installing equipment.
- The minimum clearance ensures normal operation and heat dissipation, but O&M activities such as checking indicator status and opening the cover plate of a cabling cavity cannot be properly conducted. If installation space is restricted, leave the minimum clearance after installing equipment.

Figure 2-4 show the clearances for installing a eAN3710A.

Figure 2-4 Clearances for installing a eAN3710A



SRR49C0501

Installation Spacing Between eAN3710A

Figure 2-5 lists the horizontal spacing between eAN3710A.

Figure 2-5 Clearances for installing a eAN3710A

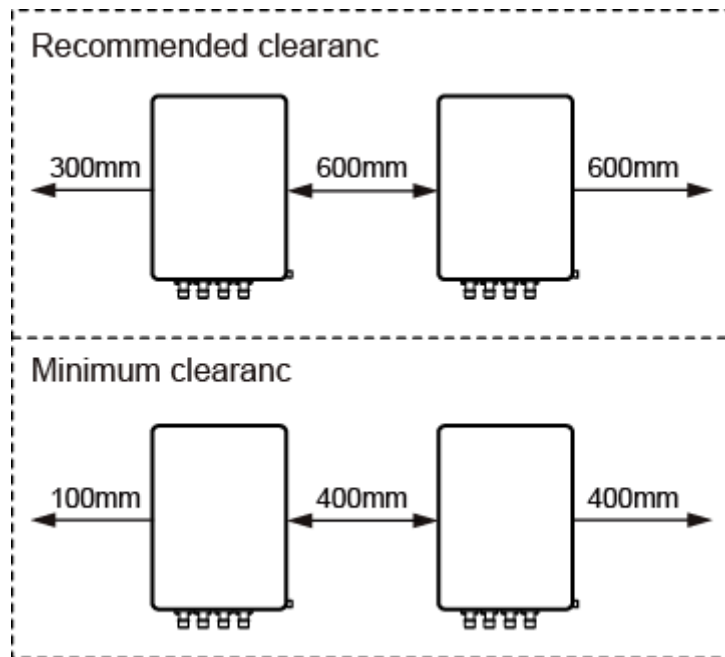
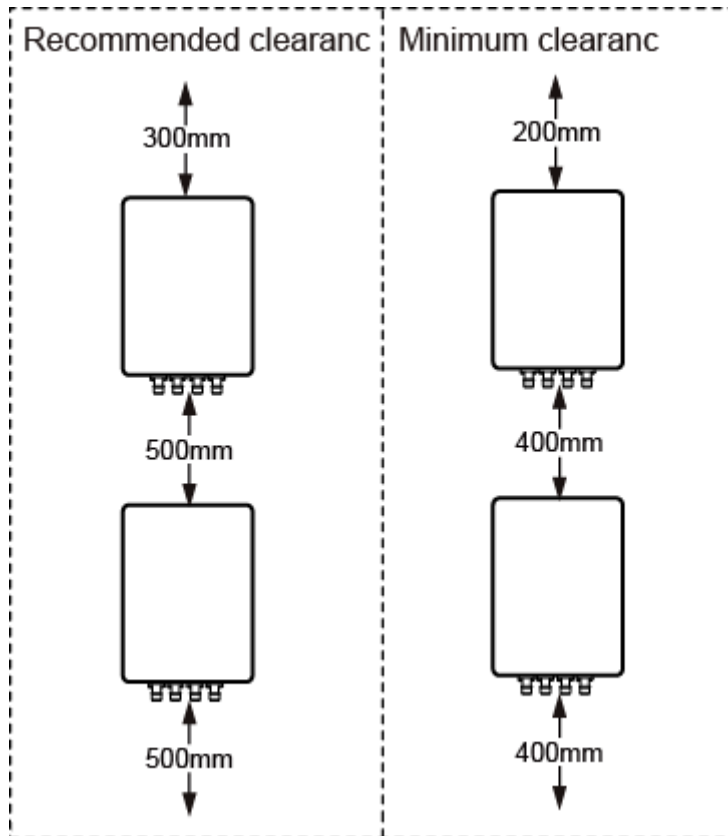


Figure 2-6 lists the vertical spacing between eAN3710A.

Figure 2-6 Clearances for installing a eAN3710A



2.2.4 Installation Environment Requirements

The installation environment of a eAN3710A involves the running environment specifications for the eAN3710A.

Running Environment Specifications

Table 2-2 shows the environment specifications for the eAN3710A.

Table 2-2 Environment specifications of eAN3710A

| Item | Specifications |
|-----------------------|--|
| Operating temperature | -40°C to +45°C (with solar radiation) -40°C to +50°C (without solar radiation) NOTE At -40°C to -20°C, the AirNode can start up, but its performance cannot meet requirements. At -20°C to +50°C, the performance of the AirNode meets requirements. |
| Storage temperature | -40°C to +70°C |
| Relative humidity | 5% RH to 95% RH |

| Item | Specifications |
|----------------------|---|
| Absolute humidity | 1 g/m ³ to 30 g/m ³ |
| Atmospheric pressure | 70 kPa to 106 kPa |
| Protection class | IP65 |

Requirements for the Installation Scenarios

To ensure proper heat dissipation of the eAN3710A, the following requirements must be met:

- The eAN3710A cannot be installed in an enclosed cabinet without a cooling system.
- The eAN3710A cannot be installed in an enclosed camouflage box.
- The eAN3710A cannot be installed in an enclosed equipment room without a cooling system.



NOTICE

If the eAN3710A is inappropriately installed, heat dissipation of the eAN3710A deteriorates and the eAN3710A may not work properly, as shown in [Figure 2-7](#).

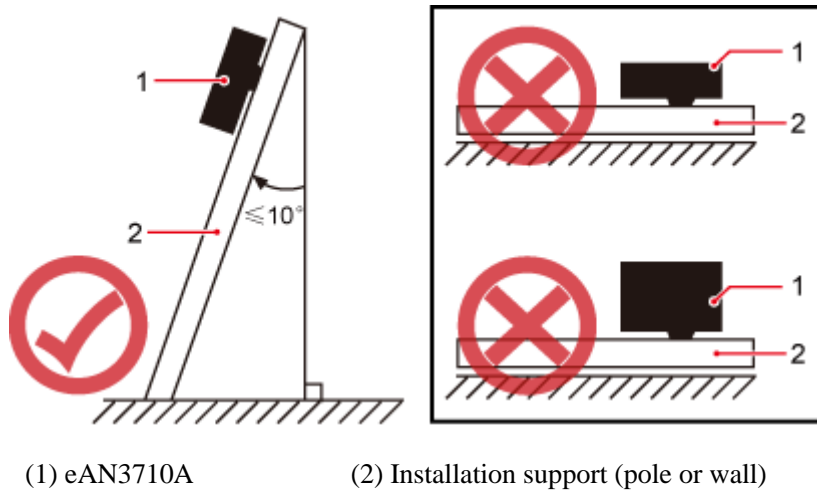
Figure 2-7 Inappropriately installed eAN3710A



Requirements for the Installation methods

To ensure the heat dissipation of the eAN3710A and waterproofing of the ports at the bottom of the eAN3710A, the vertical deviation angle of a eAN3710A must be less than or equal to 10°, as shown in [Figure 2-8](#).

Figure 2-8 Requirements for the vertical deviation angle of a eAN3710A



2.3 Unpacking the Equipment

This section describes how to unpack and check the delivered equipment to ensure that all the materials are included and intact.

Context



NOTE

When transporting, moving, or installing the equipment, components, or parts, you must:

- Prevent them from colliding with doors, walls, shelves, or other objects.
- Wear clean gloves, and avoid touching the equipment, components, or parts with bare hands, sweat-soaked gloves, or dirty gloves.



NOTICE

Power on an eAN3710A within 24 hours after unpacking it. If you power off an eAN3710A for maintenance, restore power to the eAN3710A within 24 hours.

Procedure

Step 1 Count the total number of the shipments.

| If... | Then... |
|---|--------------------------------|
| The total number of the components is consistent with that recorded in the packing lists on all packing boxes | Go to Step 2 . |

| If... | Then... |
|---|--|
| The total number of the components is inconsistent with that recorded in the packing lists on all packing boxes | Report the problems and causes to the local Huawei office. |

Step 2 Check the exterior of each packing box.

| If... | Then... |
|--|--|
| The exterior of each packing box is intact | Go to Step 3 . |
| It is damaged or soaked | Report the problems and causes to the local Huawei office. |

Step 3 Check the type and quantity of the equipment in the boxes according to the packing list.

| If... | Then... |
|---|--|
| The type and number are consistent with the packing list on each packing list | Sign the <i>Packing List</i> with the operator. |
| There is any shortage, wrong delivery, or damaged equipment | Report the problems and causes to the local Huawei office. |



CAUTION

To protect the equipment from damage, keep the unpacked equipment and packing materials indoors. To help find out the cause of any damage in the future, take photos of the storeroom, rusted or eroded equipment, packing cases, and packing materials, and then file the photos.

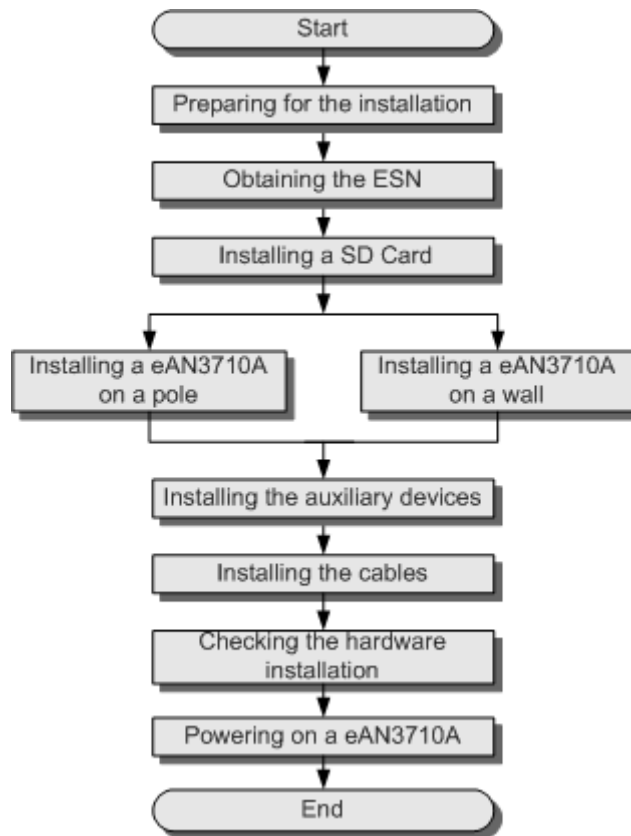
----End

2.4 Installation Process

This section describes the eAN3710A installation process.

[Figure 2-9](#) shows the eAN3710A installation process.

Figure 2-9 eAN3710A installation process



2.5 Obtaining the ESN

Before installing the eAN3710A, record its electronic serial number (ESN) for future use during commissioning.

Context

The ESN uniquely identifies a device and is required during commissioning.

Procedure

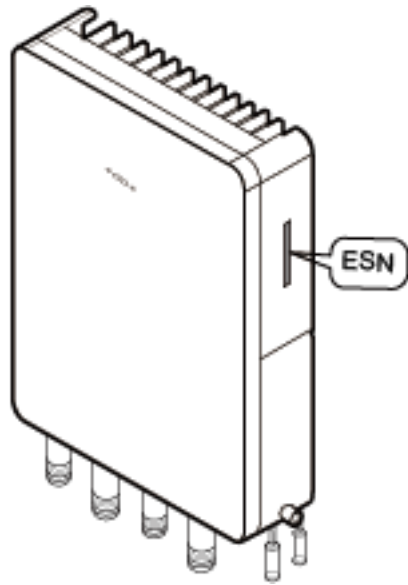
Step 1 Remove the backup ESN label from the surface of the eAN3710A. as shown in [Figure 2-10](#).



NOTE

Before removing the backup SN label, photograph it.

Figure 2-10 Removing the ESN label



Step 2 Record the ESN by using the template described in section [2.12.1 ESN Collection Template](#), and report it to the eAN3710A commissioning personnel.

----End

2.6 (Optional) Installing a Micro SD Card

This section describes how to install a micro SD card in the eAN3710A.

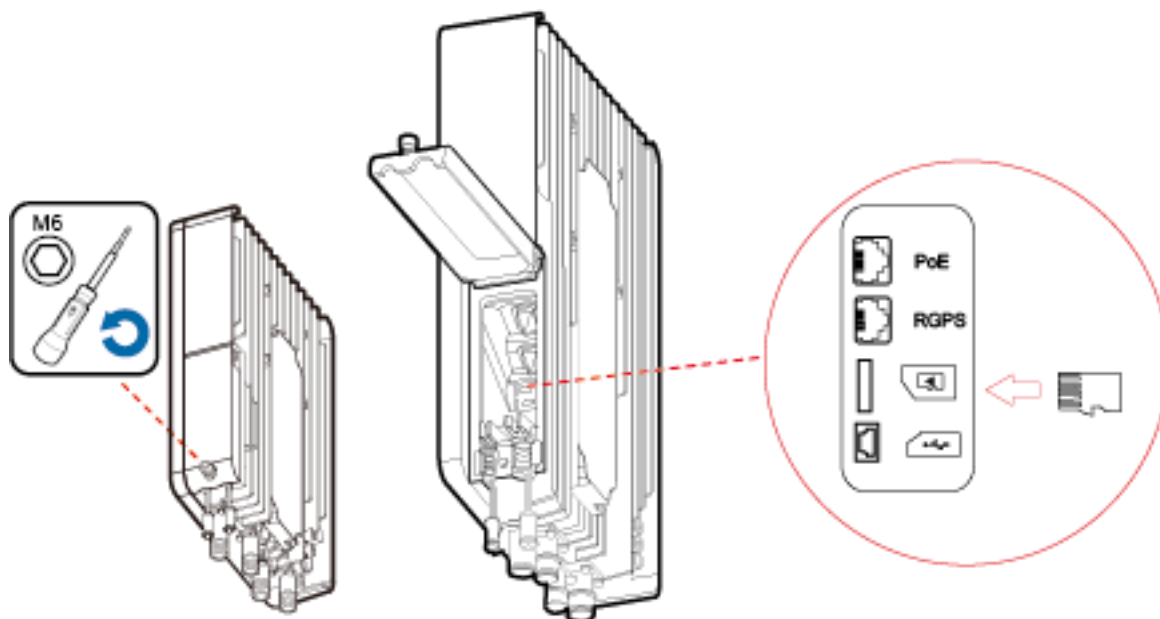
Prerequisites

Software and configuration data files need to be prepared for the micro SD card to be installed. For detailed operations, see *eAN3710A Deployment Guide*.

Procedure

- Step 1** Wear ESD gloves.
- Step 2** Use an M5 inner hexagon screwdriver to loosen a screw on the cabling cavity panel and open the cabling cavity on the side.
- Step 3** Install a micro SD card in the micro SD card slot, as shown in [Figure 2-11](#).

Figure 2-11 Installing a micro SD card



Step 4 Cover the plate for the cabling cavity and use the screwdriver to tighten the screw.

----End

2.7 Installing the eAN3710A

This section describes the eAN3710A installation process.

2.7.1 Installing eAN3710A on a Pole

This section describes the procedure and precautions for installing an eAN3710A on a pole.

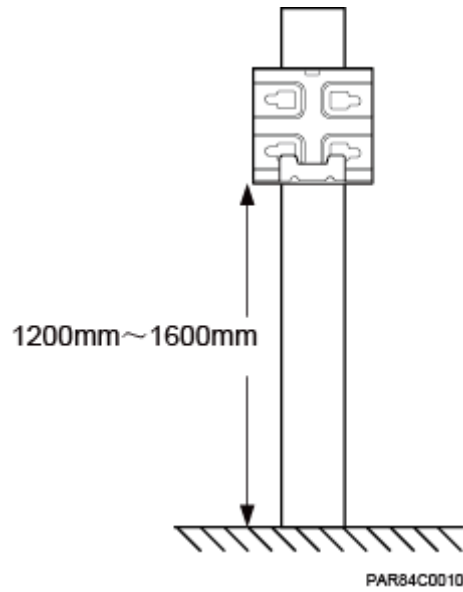
Context

- Do not stand an eAN3710A upright because the RF ports cannot support the weight of the eAN3710A.
- Place a foam pad or cardboard under an eAN3710A to protect the eAN3710A housing from damage during the installation.

Procedure

Step 1 Determine a position for installing the separate mounting kit, as shown in [Figure 2-12](#).

Figure 2-12 Distance between the separate mounting kit and the ground

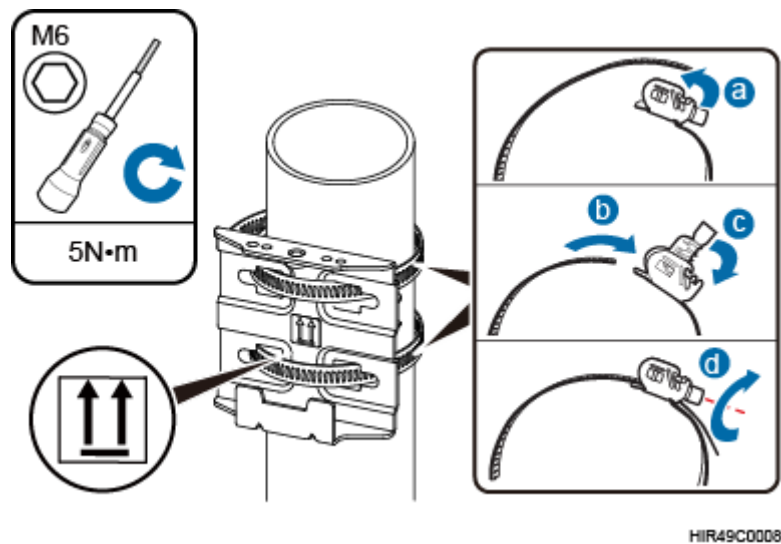


NOTE

It is recommended that the mounting kits be installed at a position 1200 mm (47.24 in.) to 1600 mm (59.06 in.) high above the ground.

Step 2 Install the mounting kit, as shown in [Figure 2-13](#).

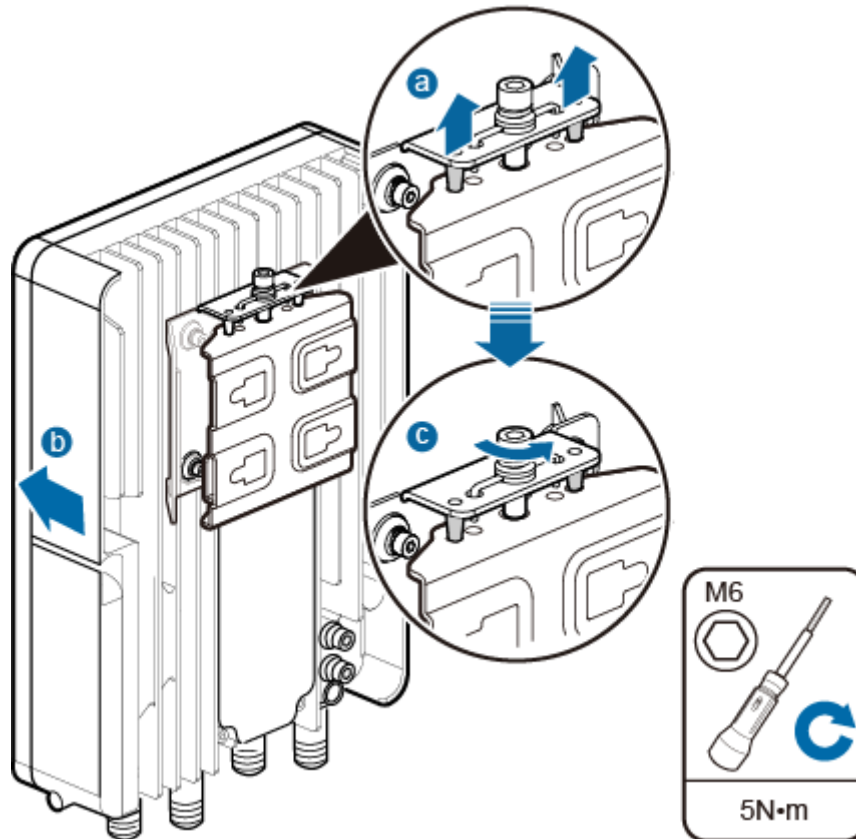
Figure 2-13 Installing the eAN3710A mounting kit



1. Determine a position for installing the eAN3710A. Then, place the separate mounting kit onto the pole, thread the hose clamp through the mounting kit, and encircle the pole with the hose clamp, as shown by illustrations a, b, and c in [Figure 2-13](#).
2. Use an M6 inner hexagon screwdriver to tighten the bolt on each hose clamp to 7 N·m (61.96 lbf·in.) to secure the mounting kit, as shown by illustration d in [Figure 2-13](#).

Step 3 Secure the eAN3710A onto the separate mounting kit, as shown in [Figure 2-14](#).

Figure 2-14 Securing the eAN3710A onto the mounting kit



1. Hang the two dowels on the top of the eAN3710A attachment plate onto the mounting kit, and push the eAN3710A until it snaps into place, as shown by illustrations a and b in [Figure 2-14](#).
2. Use the M6 inner hexagon screwdriver to tighten the screw on the top of the attachment plate to 5 N·m (44.25 lbf·in.), as shown by illustration c in [Figure 2-14](#).

----End

2.7.2 Installing eAN3710A on a Wall

This section describes the procedure and precautions for installing an eAN3710A on a wall.

Context

The wall for installing eAN3710As must meet the following requirements:

- The wall must be able to bear a weight four times heavier than the eAN3710A's weight.
- Expansion bolts must be tightened to 30 N·m (265.52 lbf·in.) to ensure that the bolt assemblies work properly and the wall remains intact.



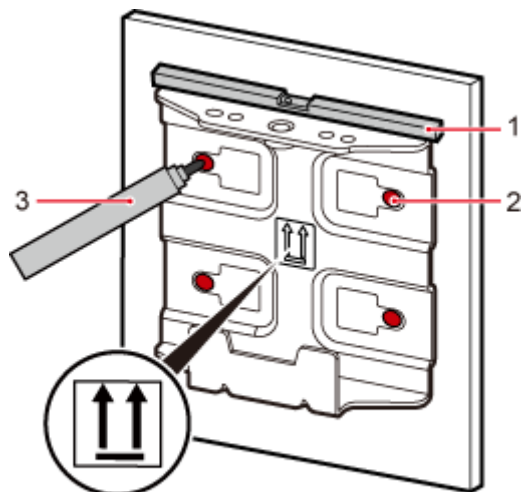
NOTICE

- Do not stand an eAN3710A upright because the RF ports cannot support the weight of the eAN3710A.
- Place a foam pad or cardboard under an eAN3710A to protect the eAN3710A housing from damage during the installation.

Procedure

- Step 1** Determine a position for installing the eAN3710A on a wall, use a level to verify that the marking-off template is placed horizontally, and then use a marker to mark anchor points, as shown in [Figure 2-15](#).

Figure 2-15 Marking anchor points



HIU01C0002

(1) Level

(2) Tapped hole

(3) Marker

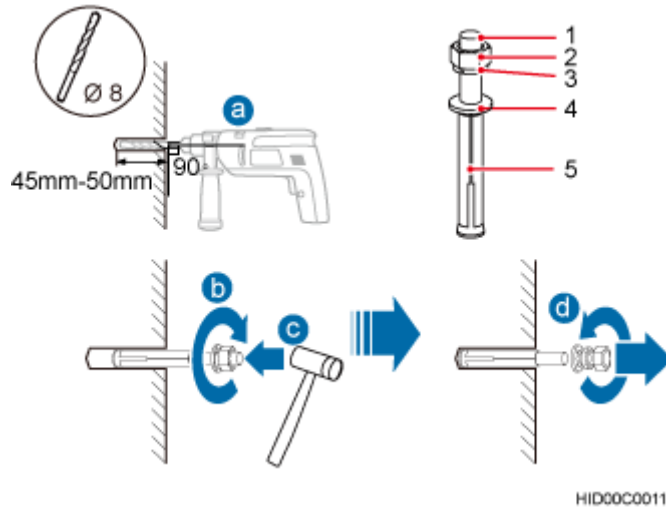


NOTE

It is recommended that the separate mounting kit be 1200 mm (47.24 in.) to 1600 mm (62.99 in.) above the ground.

- Step 2** Drill holes at the anchor points and install expansion bolts in the holes, as shown in [Figure 2-16](#).

Figure 2-16 Drilling a hole and inserting an expansion bolt assembly



(1) M6x60 bolt (2) Nut (3) Spring washer (4) Flat washer (5) Expansion tube

1. Use a hammer drill with a $\phi 8$ bit to drill holes vertically at the marked anchor points. Ensure that the depth of each hole ranges from 45 mm (1.77 in.) to 50 mm (1.97 in.).

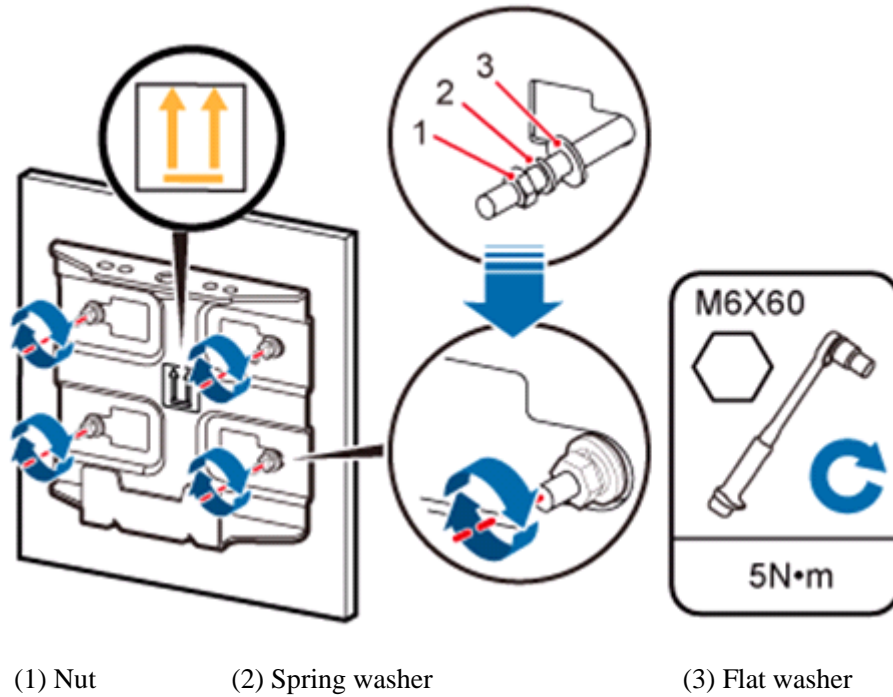
 **CAUTION**

Take proper safety measures to protect your eyes and respiratory tract against the dust before drilling holes.

2. Use a vacuum cleaner to clear the dust out from inside and around the holes, and measure the distances between holes. If any of the holes is beyond the acceptable range, mark a new anchor point and drill a new hole.
3. Tighten the expansion bolts slightly, and place each expansion bolt vertically into each hole.
4. Use a rubber mallet to pound each expansion bolt until the corresponding expansion tube completely enters the hole. Leave 20 mm (0.79 in.) of the expansion bolt outside the wall.
5. Remove the M6x60 bolt, nut, spring washer, and flat washer in sequence.

Step 3 Place the mounting kit onto the wall, insert four M6x60 bolts into the tapped holes on the mounting kit, and tighten each bolt to 5 N·m (44.25 lbf·in.) to secure the mounting kit, as shown in [Figure 2-17](#).

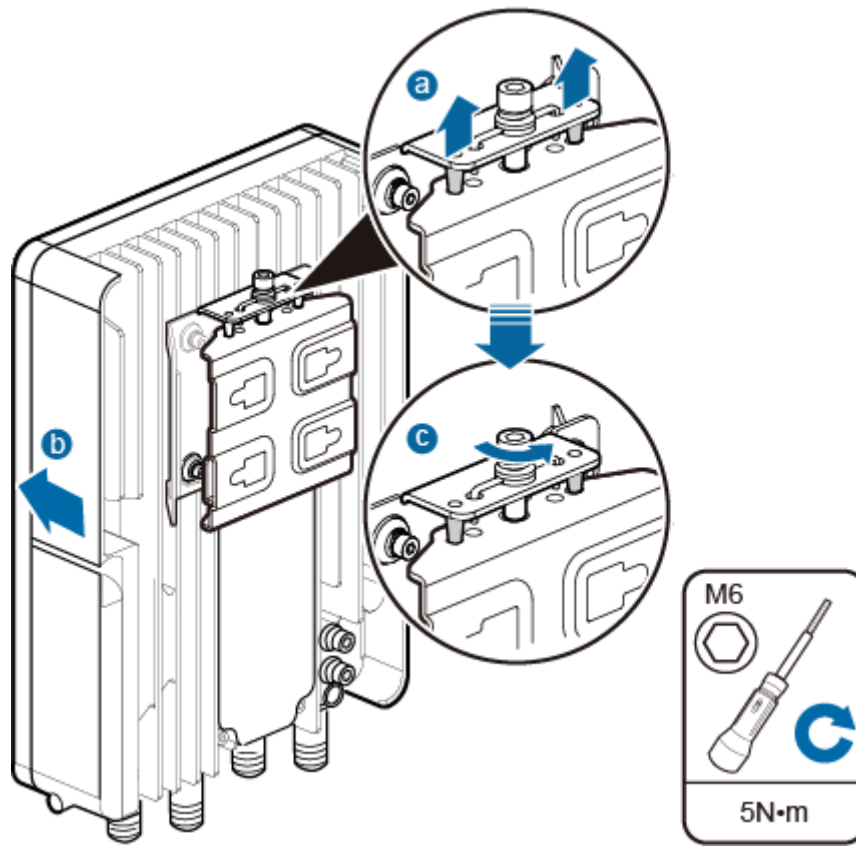
Figure 2-17 Securing the separate mounting kit



Step 4 Hold the eAN3710A, hang the two dowels on the top of the eAN3710A attachment plate onto the separate mounting kit, and push the eAN3710A until it snaps into place, as shown by illustrations a and b in [Figure 2-18](#).

Step 5 Use the M6 inner hexagon screwdriver to tighten the screw on the top of the separate attachment plate to 5 N·m (61.96 lbf·in.), as shown by illustration c in [Figure 2-18](#).

Figure 2-18 Securing the eAN3710A onto the mounting kit



----End

2.8 Installing the Auxiliary Devices

This section describes the procedure and precautions for installing the auxiliary devices.

2.8.1 (Optional) Installing a Dock

This section describes the procedure and precautions for installing a dock.

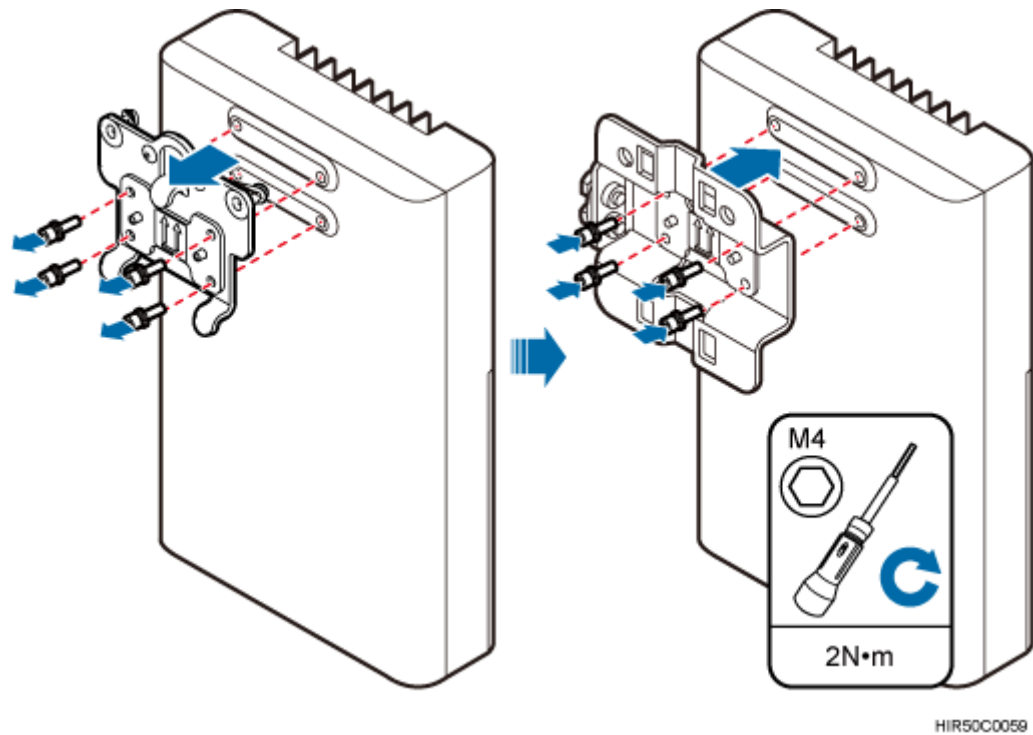
Installing a Dock on a Pole

This section describes the procedure and precautions for installing the Dock on a pole.

Procedure

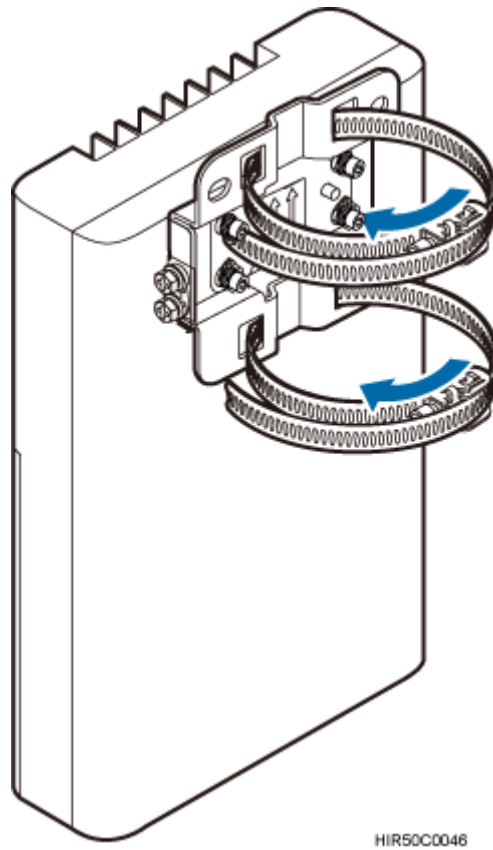
- Step 1** Use an M4 inner hexagon screwdriver to remove the Dock integrated mounting bracket, install the Dock separated mounting bracket instead, and tighten the four screws to 2 N·m (17.70 lbf·in.), as shown in [Figure 2-19](#).

Figure 2-19 Replacing the Dock mounting bracket



Step 2 Route two hose clamps through the up and down mounting holes on the Dock separate mounting bracket, but do not route the steel belts through the locks, as shown in [Figure 2-20](#).

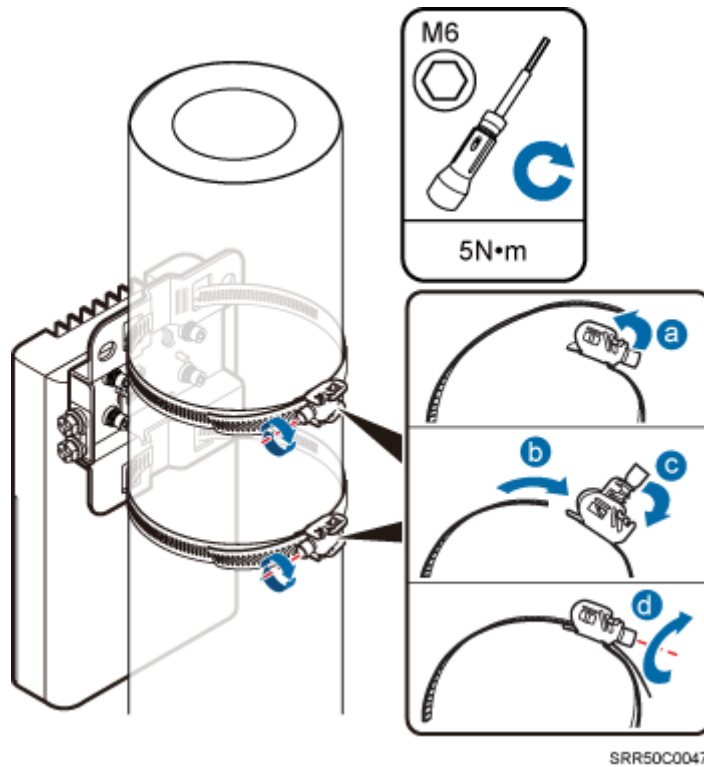
Figure 2-20 Routing hose clamps through the Dock separate mounting bracket



Step 3 Put the Dock in the installation position, route two hose clamps through the pole and the steel belts through the locking connectors, partially tighten the screws, and use an M6 inner hexagon torque screwdriver to tighten the screws to 5 N·m (44.25 lbf·in.), as shown in [Figure 2-21](#).

Ensure that your body is close to the module when tightening hose clamps.

Figure 2-21 Tightening hose clamps



----End

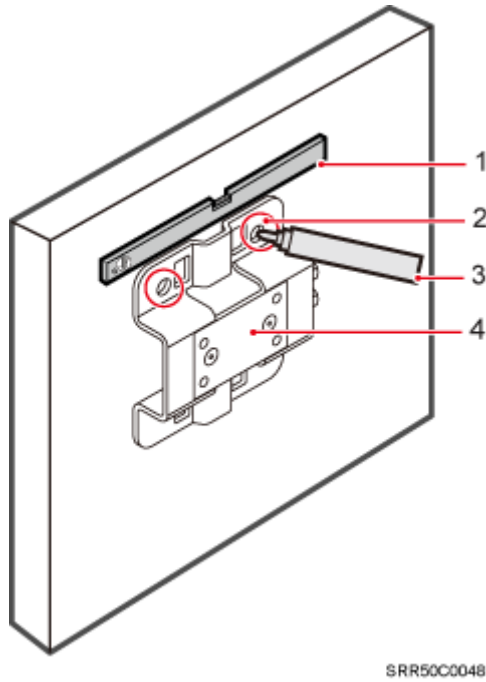
Installing a Dock on a Wall

This section describes the procedure and precautions for installing the Dock on a wall.

Procedure

- Step 1** Place the Dock separate mounting bracket against the wall, use a level to verify that the mounting bracket is horizontally placed, and use a marker to mark anchor points, as shown in [Figure 2-22](#).

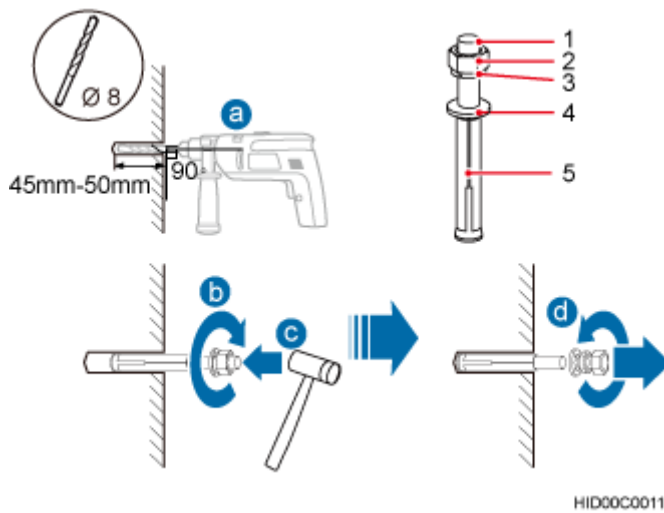
Figure 2-22 Marking anchor points



- (1) Level (2) Mounting hole (3) Marker (4) Dock separate mounting bracket

Step 2 Drill holes at the anchor points, and install expansion bolt assemblies, as shown in [Figure 2-23](#).

Figure 2-23 Drilling holes and installing expansion bolt assemblies



- (1) M6x60 bolt (2) Nut (3) Spring washer (4) Flat washer (5) Expansion tube

1. Use a hammer drill with a $\Phi 8$ drill bit to drill holes perpendicularly with the wall at the marked anchor points. Ensure that the depth of each hole ranges from 45 mm to 50 mm (1.77 in. to 1.97 in.) and each hole is of the same depth.



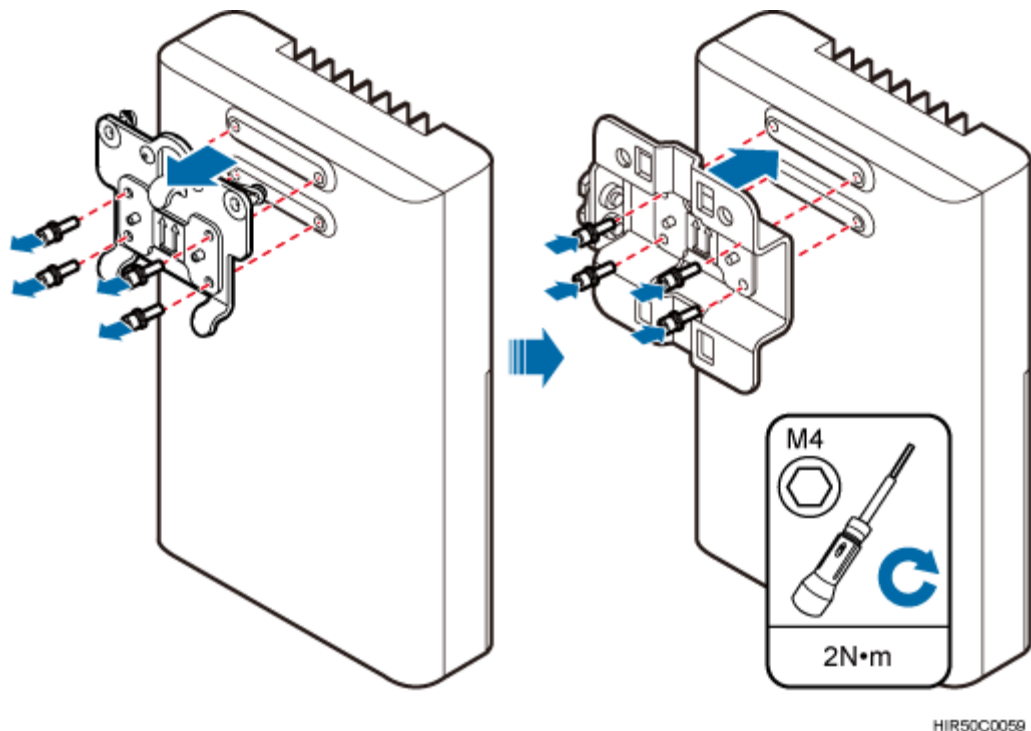
CAUTION

To prevent inhalation or eye contact with dust, take adequate preventive measures when drilling holes.

2. Use a vacuum cleaner to clear dust inside and around the holes, and then measure the inter-hole spacing. If the spacing is too wide or too narrow, drill holes again.
3. Tighten each expansion bolt slightly and place them perpendicularly into each hole.
4. Hit each expansion bolt using a rubber mallet to enable the expansion tube to enter the hole completely.
5. Remove the M6x60 bolt, nut, spring washer, and flat washer from each expansion bolt assembly in sequence.

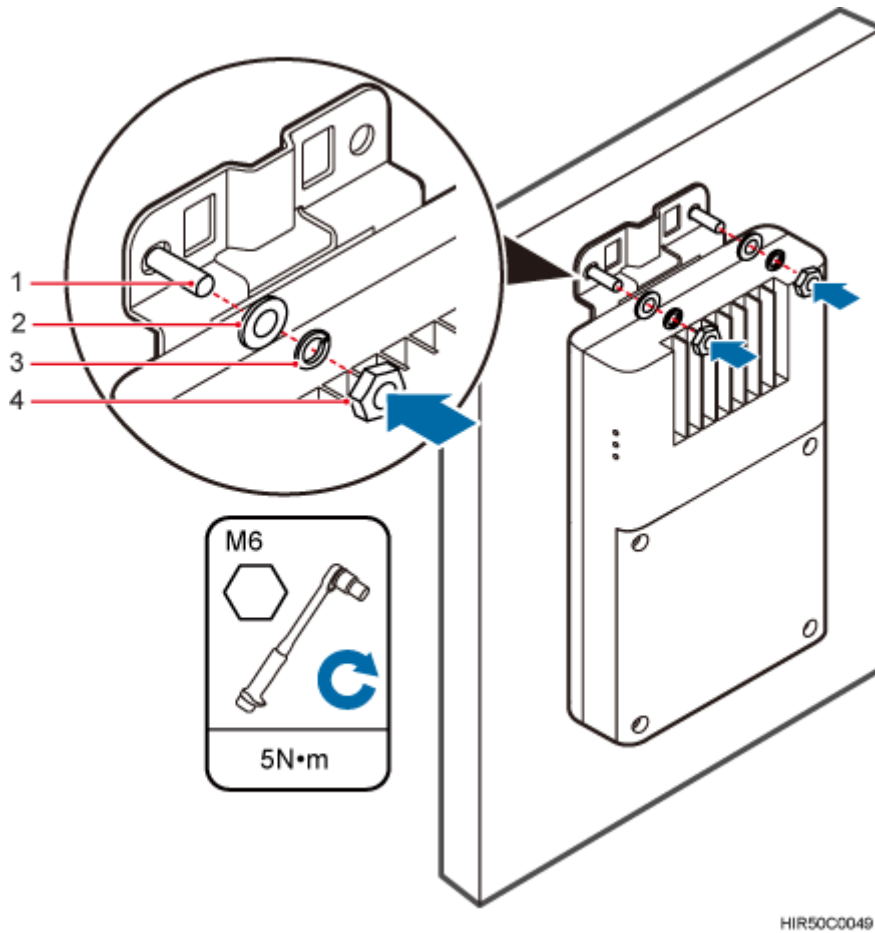
Step 3 Use an M4 inner hexagon screwdriver to remove the Dock integrated mounting bracket, install the Dock separated mounting bracket instead, and tighten the four screws to 2 N·m (17.70 lbf·in.), as shown in [Figure 2-24](#).

Figure 2-24 Replacing the Dock mounting bracket



Step 4 Put the Dock to the installation position, install the separate mounting bracket on the expansion bolts, and use an M6 socket wrench to tighten the expansion bolts to 5 N·m (44.25 lbf·in.), as shown in [Figure 2-25](#).

Figure 2-25 Fitting the Dock onto the wall



| | | | |
|----------|-----------------|-------------------|---------|
| (1) Bolt | (2) Flat washer | (3) Spring washer | (4) Nut |
|----------|-----------------|-------------------|---------|

----End

2.8.2 (Optional) Installing the PSE

This section describes the procedure and precautions for installing the PSE on a wall.

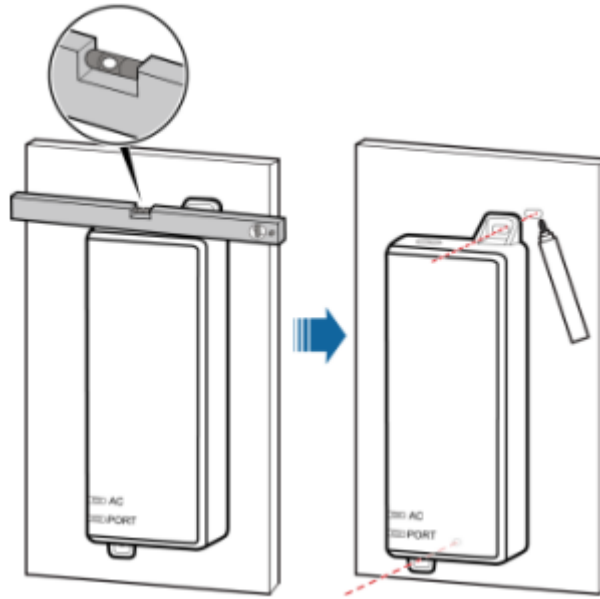
Context

The PSE can be installed only on an indoor wall.

Procedure

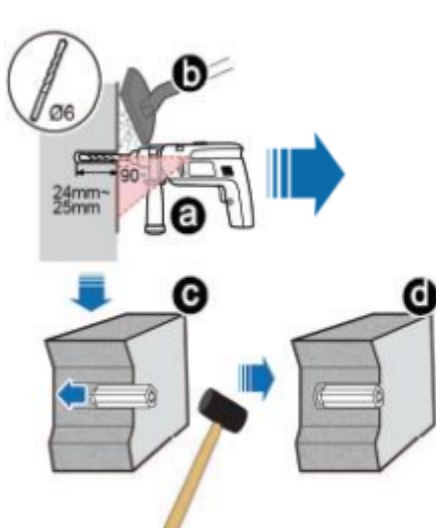
- Step 1** Place the PSE against the wall, level it in the installation position, and mark anchor points.

Figure 2-26 Marking anchor points



Step 2 Drill holes and install expansion bolts.

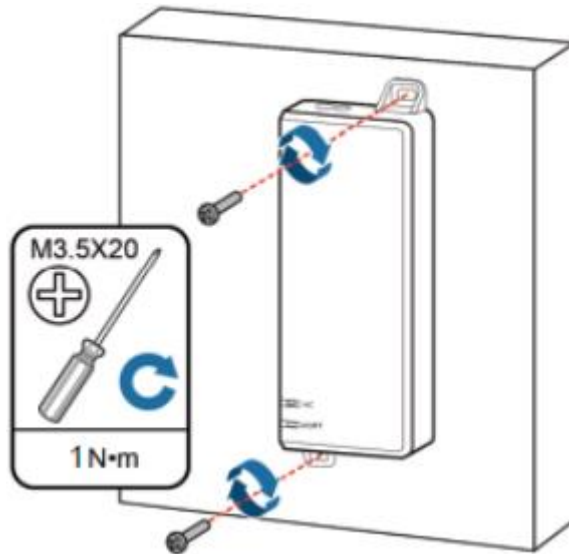
Figure 2-27 Drill holes and install expansion bolts



- a** Use a hammer drill with $\phi 6$ bore to drill holes at the marked anchor points
- b** Use a vacuum cleaner to clean the dust inside and around the holes
- c** use a rubber mallet to hit a plastic expansion sleeve into each hole, as shown as **d** in the figure.

Step 3 Install the PSE

Figure 2-28 Install the PSE



----End

2.9 Installing eAN3710A Cables

This section describes the procedures for installing eAN3710A cables and auxiliary devices cables.

2.9.1 Cabling Requirements

Cables must be laid out according to the specified cabling requirements to prevent signal interference.

 **NOTE**

If a cable listed below is not required, skip the cabling requirements of the cable.

General Cabling Requirements

Bending radius requirements

- The bending radius of a 7/8" feeder must be greater than 250 mm (9.84 in.), and the bending radius of a 5/4" feeder must be greater than 380 mm (14.96 in.).
- The bending radius of a 1/4" jumper must be greater than 35 mm (1.38 in.). The bending radius of a super-flexible 1/2" jumper must be greater than 50 mm (1.97 in.), and the bending radius of an ordinary 1/2" jumper must be greater than 127 mm (5.00 in.).
- The bending radius of a PGND cable must be at least three times its diameter.
- The bending radius of a signal cable must be at least five times its diameter.

Cable binding requirements

- Cables of the same type must be bound together.
- Different types of cables must be separately laid out and bound, with a minimum distance of 30 mm (1.18 in.) from each other.

- Cables must be bound tightly and neatly. The sheaths of cables must not be damaged.
- Cable ties must face the same direction, and those at the same horizontal line must be in a straight line.
- The excess of indoor cable ties must be cut off. The excess of 5 mm (0.197 in.) of outdoor cable ties should be reserved, and the cut surfaces must be smooth without sharp edges.
- After cables are installed, labels or nameplates must be attached to the cables at their ends, curves, and interconnection positions.

Security requirements

- When laying out cables, avoid sharp objects, for example sharp edges on the wall. If necessary, use tubes to protect the cables.
- When laying out cables, keep cables away from heat sources, or use heat insulation materials to insulate the cables from the heat sources.
- Reserve a proper distance (0.1 m [3.937 in.] is recommended) between equipment and cables especially at the cable curves to protect the cables and equipment.

Indoor cabling requirements

- Route each cable into the room through the feeder window.
- Reserve drip loops for all cables outside the feeder window before routing them into the room. Ensure that the radiuses of the drip loops are greater than or equal to the minimum bending radiuses of the cables.
- When routing a cable into the room, ensure that a person is assisting you in the room.
- Apply waterproof treatment to the feeder window.

Outdoor Cabling Requirements

- Protect outdoor cables against potential damage. For example, thread the cables through tubes.
- Cables to be protected include AC power cables, transmission cables, and cables laid out underground.
- Use cable clips to secure cables outdoors.
- Arrange cables neatly along the routing direction and use cable clips to secure the cables.
- Determine the positions where the clips are installed according to the actual situation. For example, 7/8" feeders are secured with clips at an interval of 1.5 m (4.92 ft) to 2 m (6.56 ft), and CPRI fiber optic cables and power cables are secured with clips at an interval of 1 m (3.28 ft) to 1.5 m (4.92 ft). Ensure that the clips are evenly spaced and in the same direction.
- When fastening cables with a clip, ensure that the cables are aligned neatly and are routed through the holes in the clip. Do not stretch the cables too tightly.
- When using clips to secure cables, tighten the screws on the clips after all cables are arranged and laid out.

Special Cabling Requirements

Cabling of PGND cables

- PGND cables for a base station must be connected to the same ground bar.
- PGND cables must be buried in the ground or routed indoors.

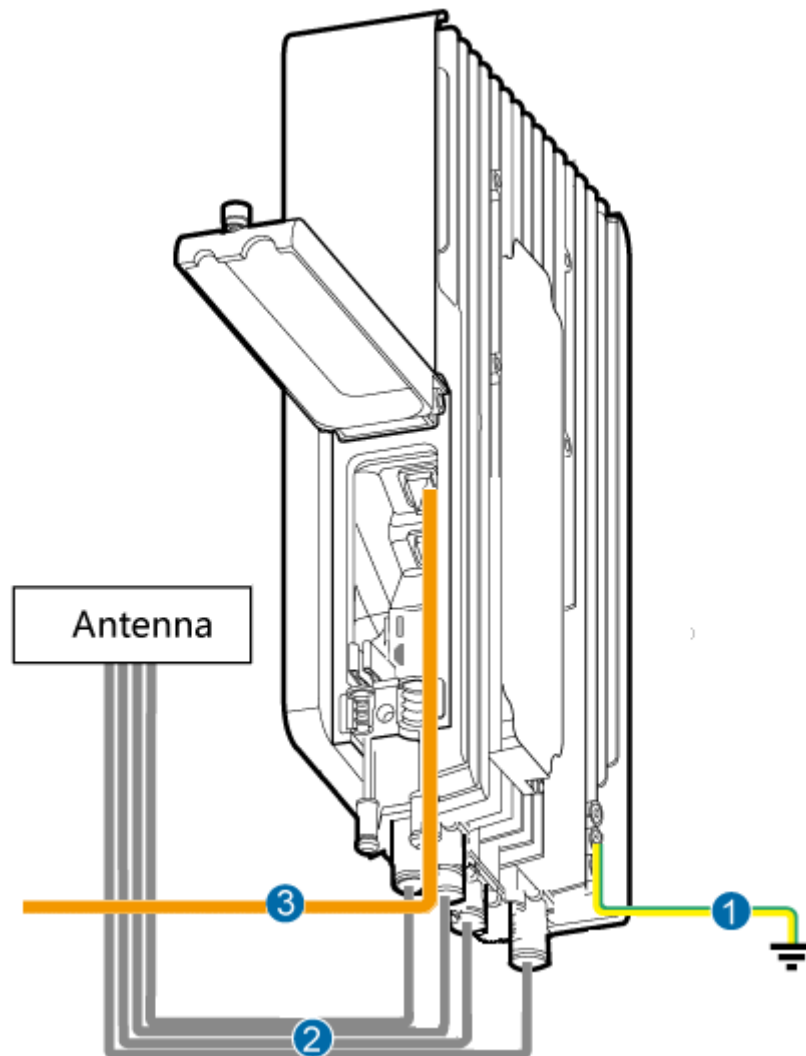
- The external conductor of the coaxial wire and the shield layer of the shielded cable must have proper electrical contact with the metal surface of the equipment which they are connected to.
- PGND cables and signal cables must be installed separately. A certain distance must be reserved between them to prevent interference from each other.
- Switches or fuses must not be installed on the PGND cables.
- Other devices must not be used for electrical connections of the PGND cables.
- All the metal parts in the housing of the equipment must be reliably connected to the ground terminal.

2.9.2 eAN3710A Cable Connections

This section describes eAN3710A cable connections.

Figure 2-29 shows the cable connections when an eAN3710A is installed.

Figure 2-29 Cable connections when an eAN3710A is installed



| | | |
|----------------|---------------|--------------------|
| (1) PGND cable | (2) RF jumper | (3) Ethernet cable |
|----------------|---------------|--------------------|

2.9.3 Installing a PGND Cable

This section describes the procedure for installing a PGND cable.

Procedure

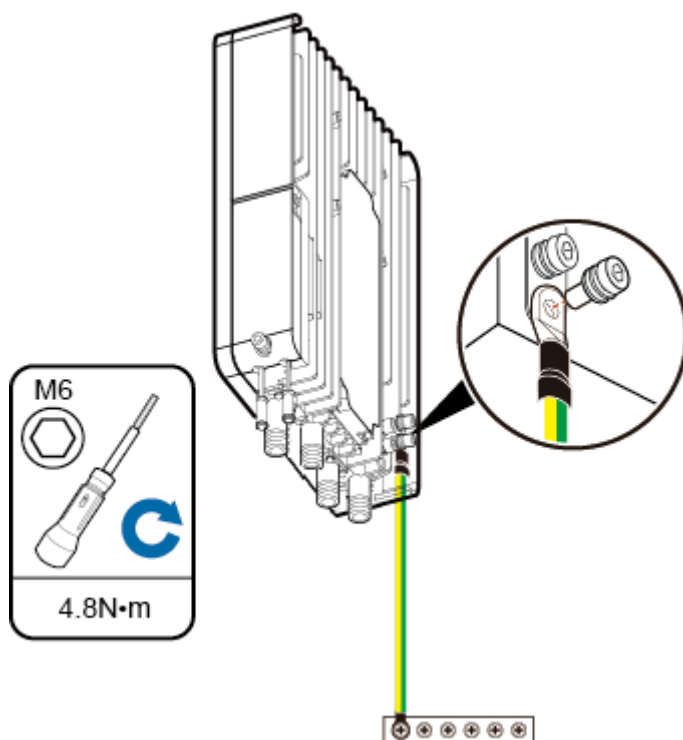
Step 1 Prepare a eAN3710A PGND cable.

1. Cut the cable to a length suitable for the actual cable route.
2. Add OT terminals to both ends of the cable.

Step 2 Install the eAN3710A PGND cable.

Connect one end of the PGND cable with an M6 OT terminal to the ground terminal at the eAN3710A bottom and the other end of the cable with an M8 OT terminal to the external ground bar, as shown in [Figure 2-30](#).

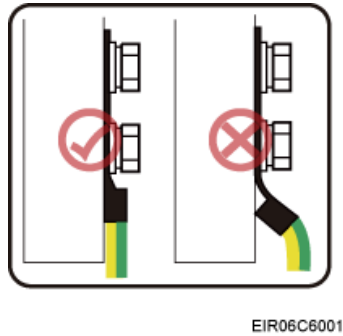
Figure 2-30 Installing a eAN3710A PGND cable



NOTE

Crimp OT terminals in correct directions, as shown in [Figure 2-31](#).

Figure 2-31 Correct direction for crimping an OT terminal



Step 3 Label the installed cable.



NOTE

Follow the same procedure when installing a Dock PGND cable.

----End

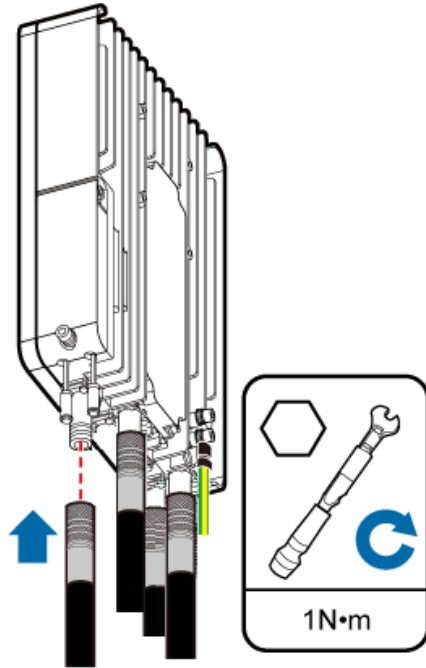
2.9.4 Installing a RF Jumper

This section describes the procedure for installing an RF jumper.

Procedure

- Step 1** Remove the dustproof cap from the ANT port to be used on the eAN3710A.
- Step 2** Connect the type N male connector at one end of the eAN3710A RF jumper to the ANT port at the bottom of the eAN3710A in sequence, and use a torque wrench to tighten the connector to 1 N·m (8.85 lbf·in.), as shown in [Figure1](#).

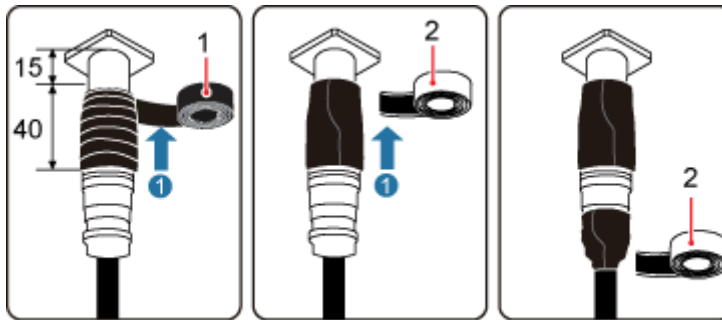
Figure 2-32 Installing an RF jumper



Step 3 Connect the other end of the eAN3710A RF jumper to the external antenna system.

Step 4 Waterproof the connector of the RF jumper by waterproof tape, as shown in [Figure 2](#).

Figure 2-33 Waterproof the connector of the RF jumper by waterproof tape



| | |
|-------------------------|---------------------|
| (1) PVC insulation tape | (2) Waterproof tape |
|-------------------------|---------------------|

 **NOTICE**

- During installation, ensure that no foreign substance, including sand, enters the waterproof tape.

1. Wrap a PVC insulation tape around the exposed area of the connector. The wrapped area is 15 mm away from the end of the connector, with a total length of 40 mm.
2. Ensure that dimensions (L x W) of the waterproof tape is 50 mm x 50 mm. Stretch the tape horizontally until it is twice of the original length and wrap it around the upper area of the connector.

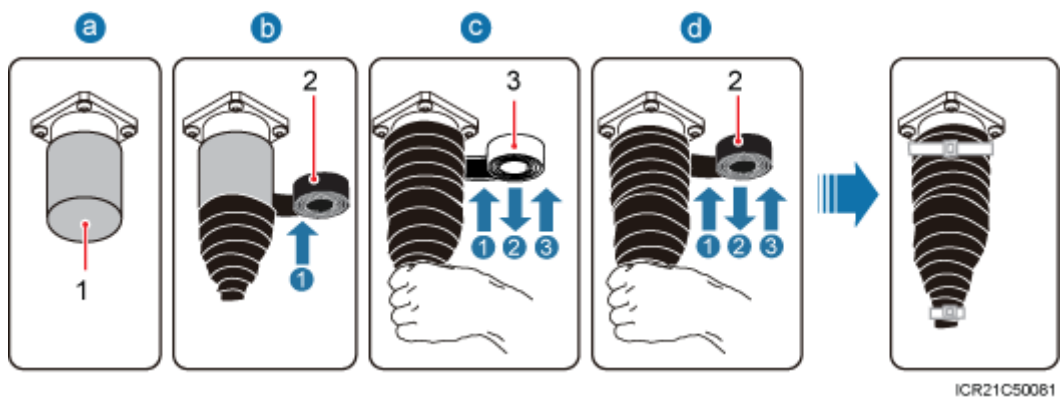
Ensure that the upper end of the waterproof tape overlays that of the PVC insulation tape.

Step 5 Check the dustproof caps on antenna connectors. In outdoor scenarios, dustproof caps must be waterproofed, as shown in [Figure3](#).

 **NOTICE**

Do not remove dustproof caps from vacant antenna connectors.

Figure 2-34 Waterproofing a dustproof cap



(1) Dustproof cap

(2) PVC insulation tape

(3) Waterproof tape

1. Verify that dustproof caps are not removed.
2. Wrap one layer of PVC insulation tape on each connector from bottom up.
3. Wrap three layers of waterproof tape on each connector, first from bottom up, then from top down, and finally from bottom up. Wrap each layer of the tape around the connector tightly.
4. Wrap three layers of PVC insulation tape on each connector, first from bottom up, then from top down, and finally from bottom up. Wrap each layer of the tape around the connector tightly.

 **NOTE**

- When wrapping waterproof tape, stretch the tape evenly until it is twice of the original length. When wrapping PVC insulation tape, do not stretch it.

- Wrap each layer of tape around each connector tightly and neatly, and ensure that the adhesive surface of each layer of tape overlaps more than 50% of the lower layer.
- When cutting off a cable tie, reserve a surplus length of 3 mm (0.12 in.) to 5 mm (0.20 in.).

----End

Follow-up Procedure

1. Route the cable by following the instructions in section cabling requirements and use cable ties to bind the cable.
2. Label the installed cable.

2.9.5 Installing an eAN3710A Ethernet Cable

This section describes how to install an Ethernet cable.

Context

- The Ethernet cable must be of Category 5e (enhanced) or higher. In addition, its cross-sectional area must be 24 AWG or larger and frame spread rating must be CM or higher.
- Both the cable and the RJ45 connectors are delivered, and they must be prepared onsite. You need to use a network cable tester to test the Ethernet cable connection.
- With the internal PoE module providing power, the maximum length of an Ethernet cable is 100 m.

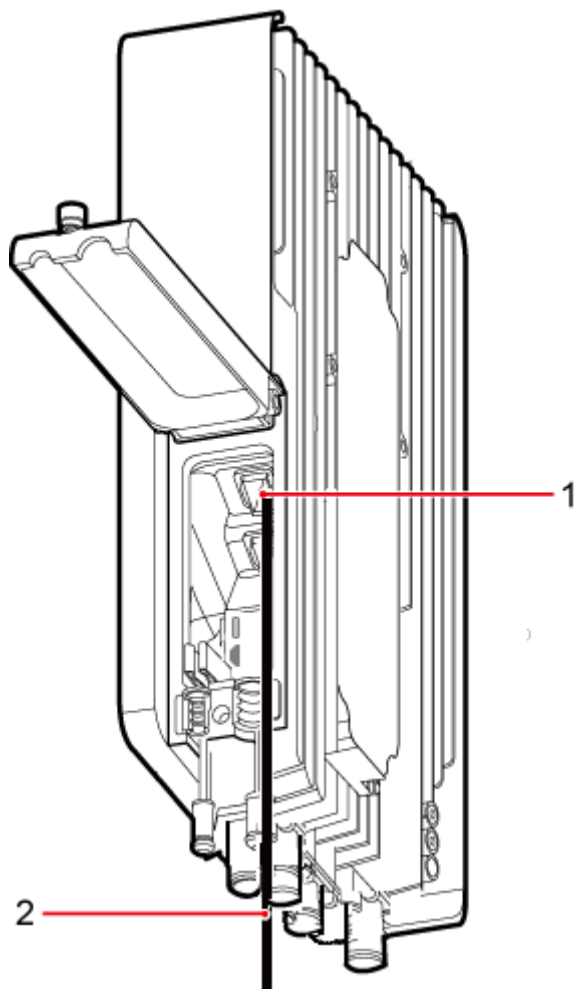
Procedure

Step 1 Make the Ethernet cables.

1. Assemble an RJ45 connector and an Ethernet cable.
2. Check whether the made RJ45 connector is qualified.
3. To complete the assembly of the other end, repeat [Step 1.1](#) and [Step 1.2](#).
4. Check whether the touch points on the connectors at both ends are normally conducted and well contacted and whether the connections are correct.

Step 2 Connect the RJ45 connector at one end of the Ethernet cable to the PoE port on the eAN3710A panel, and push the cables into the cable clips, as shown in [Figure 2-35](#).

Figure 2-35 Installing an eAN3710A Ethernet cable



| | |
|------------------------------------|--------------------|
| (1) PoE port on the eAN3710A panel | (2) Ethernet cable |
|------------------------------------|--------------------|

Step 3 Connect the RJ45 connector at the other end of the Ethernet cable to auxiliary devices port.
----End

Follow-up Procedure

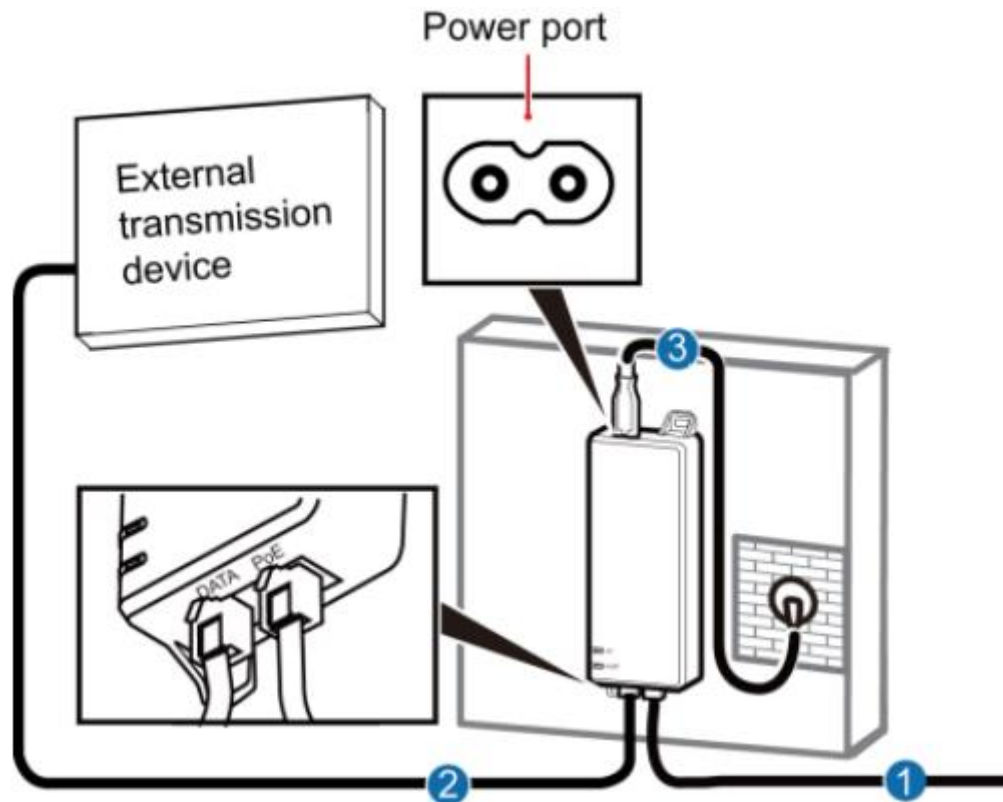
1. Route the cable, and then use a cable tie to bind the cable.
2. Label the installed cable.

2.9.6 (Optional) Installing the PSE Cable

This section describes the procedure and precautions for installing the PSE cables.

[Figure 2-36](#) shows the cable connections when the PSE is installed.

Figure 2-36 Installing the PSE Cable



| | | |
|---|---|--------------------------|
| (1) Ethernet cable between eAN3710A and PSE | (2) Ethernet cable between PSE and External transmission device | (3) PSE Power cable (2m) |
|---|---|--------------------------|



NOTE

The total length of cables connected between the eAN3710A, PSE, and external transmission device does not exceed 100 m.

2.9.7 (Optional) Installing the Dock Ethernet Cable

This section describes procedure and precautions for installing a Dock Ethernet cable.

Context

- The Ethernet cable must be of Category 5e (enhanced) or higher. In addition, its cross-sectional area must be 24 AWG or larger and frame spread rating must be CM or higher.
- Ethernet cables are not delivered, and they must be prepared onsite. You need to use a network cable tester to test the Ethernet cable connection.
- With the internal PoE module providing power, the maximum length of an Ethernet cable is 100 m.

Procedure

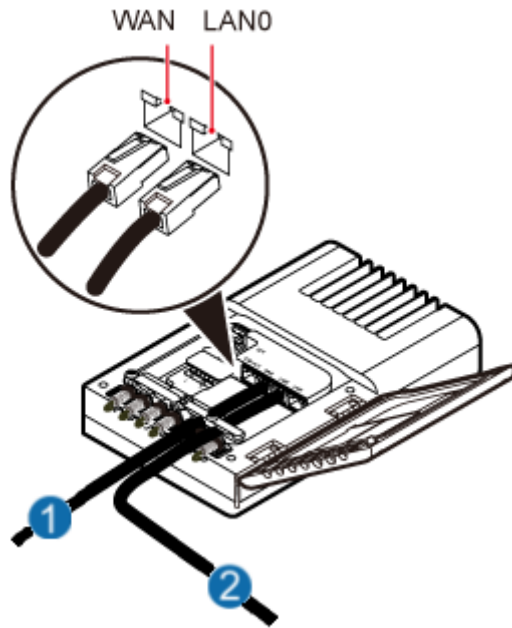
Step 1 Make the Ethernet cables.

1. Assemble an RJ45 connector and an Ethernet cable.

2. Check whether the made RJ45 connector is qualified.
3. To complete the assembly of the other end, repeat [Step 1.1](#) and [Step 1.2](#).
4. Check whether the touch points on the connectors at both ends are normally conducted and well contacted and whether the connections are correct.

Step 2 Installing the Dock Ethernet cable, as shown in [Figure 2-37](#).

Figure 2-37 Installing the Dock Ethernet cable



| | |
|--|--|
| (1) Ethernet cable between Dock and external transmission device | (2) Ethernet cable between eAN3710A and Dock |
|--|--|

1. Connect one end of the assembled Ethernet cable to the **WAN** port in the cabling cavity of the Dock and the other end to the external transmission device.
2. Connect the other end of the Ethernet cable, which is connected to the **PoE** port on the eAN3710A, to the **LAN0** port in the cabling cavity of the Dock.



NOTICE

The eAN3710A must be connected to the LAN0 port on the Dock. Otherwise, you are not able to maintain the eAN3710A remotely.

----End

2.9.8 (Optional) Installing the Dock Power Cable

This section describes the procedure and precautions for installing a power cable. A Dock input power cable connects the Dock and an external power supply device to lead external

power into the Dock. A Dock cascading power cable is used for power supply cascading between two Docks.

Context

Table 2-3 lists the specifications of the two power cables.

Table 2-3 Power cable specifications

| Cable | | Color | One End | The Other End |
|----------------------------|----|------------------|--|--|
| Dock input power cable | L | Brown | Cord end terminal (1.5 mm ²) | Depends on the external power device |
| | N | Blue | Cord end terminal (1.5 mm ²) | Depends on the external power device |
| | PE | Yellow and green | Cord end terminal (1.5 mm ²) | Depends on the external power device |
| Dock cascading power cable | L | Brown | Cord end terminal (1.5 mm ²) | Cord end terminal (1.5 mm ²) |
| | N | Blue | Cord end terminal (1.5 mm ²) | Cord end terminal (1.5 mm ²) |
| | PE | Yellow and green | Cord end terminal (1.5 mm ²) | Cord end terminal (1.5 mm ²) |



NOTE

The color and structure of the power cables differ in different countries and regions. The power cables purchased locally must conform to the local standards.

Procedure

Step 1 Make power cables.

1. Cut the cable to a length suitable for the actual cable route.
2. Add an OT terminal to one end of the cable, and add the corresponding power terminal to the other end according to external power supply device.
3. **Optional:** Add an OT terminal to each end of the Dock cascading power cable.

Step 2 Install power cables, as shown in Figure 2-38.

1. Open the protective cover of the power supply terminal.
2. Install Dock input power cables.

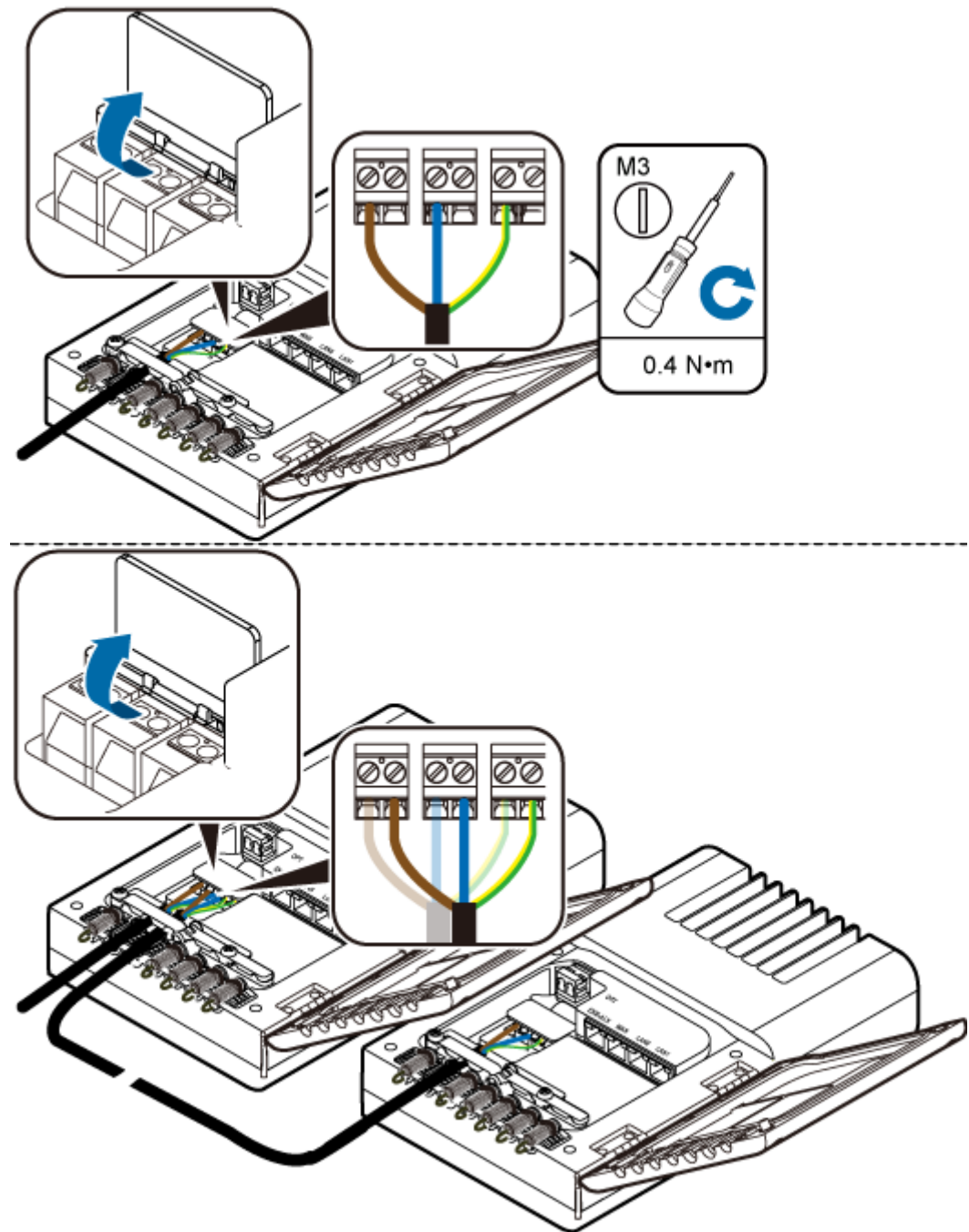
Use a flat-head screwdriver to loosen the left ports on the **L**, **N**, and **PE** wiring posts inside the Dock. Connect one end of each cable to the corresponding port on the left side and tighten the wiring posts. Connect the other end to external devices.

3. **Optional:** Install Dock cascading power cables.

Use a flat-head screwdriver to loosen the right ports on the **L**, **N**, and **PE** wiring posts inside one Dock. Connect one end of each cable to the corresponding port on the right side and tighten the wiring posts. Connect the other end of cables to corresponding ports on the **L**, **N**, or **PE** wiring posts inside the lower-level cascaded Dock.

4. Restore the protective cover of the power supply terminal.

Figure 2-38 Installing power cables



HIR50C0055



NOTICE

The protective cover of the power supply terminal is automatically secured. After the procedure is complete, tap the protective cover to restore it.

----End

2.10 Checking the eAN3710A Hardware Installation

eAN3710A hardware installation checking includes hardware and cable installation checking.

Table 2-4 lists the hardware installation checking items.

Table 2-4 Hardware installation checking list

| No. | Item |
|-----|--|
| 1 | The installation position of each device strictly complies with the engineering design and meets clearance requirements. Sufficient space is reserved for equipment maintenance. |
| 2 | The eAN3710A is securely installed. |
| 3 | The cover plate is securely installed on the eAN3710A cabling cavity. |
| 4 | Waterproof blocks are securely installed in vacant cable troughs of the eAN3710A cabling cavity, and the cover plate of the cabling cavity is securely installed. In addition, vacant RF ports are covered with dustproof caps and the caps are tightened. |
| 5 | Labels are correct, legible, and complete at both ends of each cable, feeder, and jumper. |

Table 2-5 lists the check items of the signal cable connection.

Table 2-5 Checklist for the signal cable connection

| No. | Item |
|-----|---|
| 1 | The connectors of the signal cables must securely connected. |
| 2 | The connectors of the signal cables are intact. |
| 3 | The signal cables are intact. |
| 4 | The cable ties are evenly spaced. The signal cables are bound neatly with cable ties to proper tightness, and arranged at even intervals in the same direction. |
| 5 | The extra length of the cable ties is cut and removed. The cut surfaces of the indoor cables are smooth and have no sharp edges. |
| 6 | The cable layout facilitates maintenance and expansion. |
| 7 | Correct and clear labels are attached to both ends of the signal cables. |

Table 2-6 lists the checking items for other cable connections.

Table 2-6 Checklist for other cable connections

| No. | Item |
|-----|---|
| 1 | The connectors of the other cables must securely connected. |
| 2 | Labels on the cables are legible and bound based on the engineering requirements. The cables must be bound tightly and neatly. The sheaths of the cables must not be damaged. |
| 3 | Positions for routing the cables must meet requirements of the engineering design. |
| 4 | There are no connectors or joints on each PGND cable. None of PGND cables can be short-circuited or reversely connected. In addition, these cables are not damaged or broken. |
| 5 | PGND cables are separately bound from other cables. |
| 6 | The protection grounding of the eAN3710A and the surge protection grounding of the building share one group of ground conductors. |

2.11 Power-On Check on the eAN3710A

This section describes the procedure for performing a power-on check on the eAN3710A.

eAN3710A Power-On Check Procedure

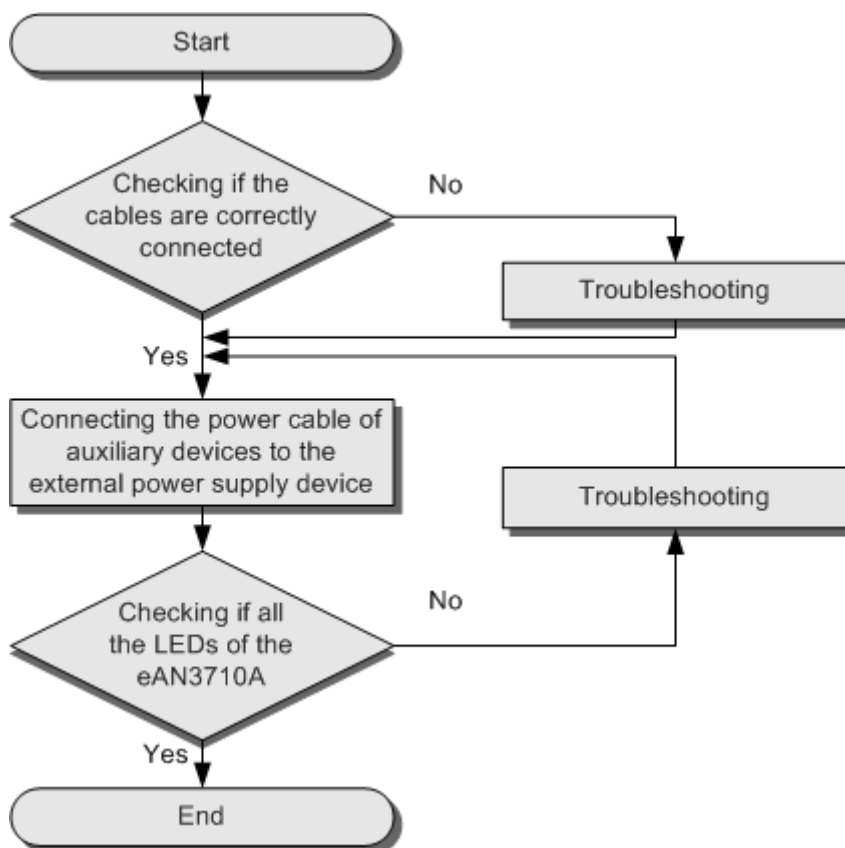


NOTICE

After you unpack a eAN3710A, you must power on it within 24 hours. If you power off the eAN3710A for maintenance, you must restore power to it within 24 hours.

[Figure 2-39](#) shows the eAN3710A power-on check procedure.

Figure 2-39 Power-on check procedure



Checking the Indicator Status

Table 2-7 Checking the indicator status

| If... | | then... |
|-------|----------------|------------------------------------|
| RUN | Steady white | The eAN3710A is running correctly. |
| ETH | Blinking white | |
| WIFI | Off | |
| LINK | Off | |

 **NOTE**

- During the eAN3710A startup, there is no need to observe the indicator status.
- During a start, the eAN3710A reads and writes the flash and therefore the indicators blinking quickly may blink irregularly for 1-2 seconds, which does not affect services.

2.12 Appendix


This section describes reference information during installation.

2.12.1 ESN Collection Template

This section describes the eAN3710A ESN collection template.

The ESN collection template is used to record the installation position, and ESN of the site at the initial installation stage to facilitate subsequent commissioning and maintenance. [Table 2-8](#) shows the ESN collection template.

Table 2-8 ESN collection template

| No. | Site Number | Site Name | Base Station ESN | Location Information |
|---|-------------|--------------|---|--|
| <i>Sample</i> | <i>xx</i> | <i>eAN_1</i> |  | <i>xx floor, xx building, xx mansion</i> |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| <p>Note: The ESN collection template is essential to the engineering stage and subsequent maintenance, especially when multiple devices are installed at a short distance. This is because the template defines the radio network to access. Please maintain this template with caution.</p> | | | | |

2.12.2 Antenna Installation

This section describes the reference documents for installing the antenna system.

| Related Document | Description |
|--|---|
| Antenna System (on Tower) Quick Installation Guide | This document describes the installation procedure and manhour requirements of the antenna system. |
| Antenna System (on Roof Pole) Quick Installation Guide | This document describes the installation procedures and methods of the antenna system on roof pole. |
| GPS Satellite Antenna System Quick | This document describes the installation procedures and methods of the GPS antenna |

| Related Document | Description |
|------------------------------------|-------------|
| Installation Guide | system. |