



BTS3701B V300R003 Installation Guide

Issue: 01
Date: 2010-03-20

HUAWEI TECHNOLOGIES CO., LTD.



Safety Precautions

■ Abide by All Safety Requirements

To ensure personal and equipment safety, abide by safety precautions described in the label on equipment or in the manual when you install, operate, or maintain the equipment. The "Safety Warning", "Caution", and "Note" in the manual are not the contents of safety requirements. They are provided as the supplement to the safety precautions.

When operating Huawei products or equipment, strictly follow all precautions and special safety instructions required by Huawei. The "Safety Warning" in the manual is only based on the knowledge of Huawei. Huawei will not assume any responsibility for the loss incurred by operations violating the universal safety rules or standards for designing, producing, or using the equipment.






■ Abide by Local Laws and Regulations

When operating the equipment, abide by local laws and regulations.

■ Requirements for Personnel

The installation and maintenance personnel of Huawei equipment must be strictly trained. They are not allowed to install, operate, or maintain the equipment until they have mastered the correct operation method and got familiar with the safety requirements.

■ Symbol Description

 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.



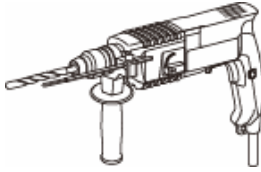








■ Personal Safety

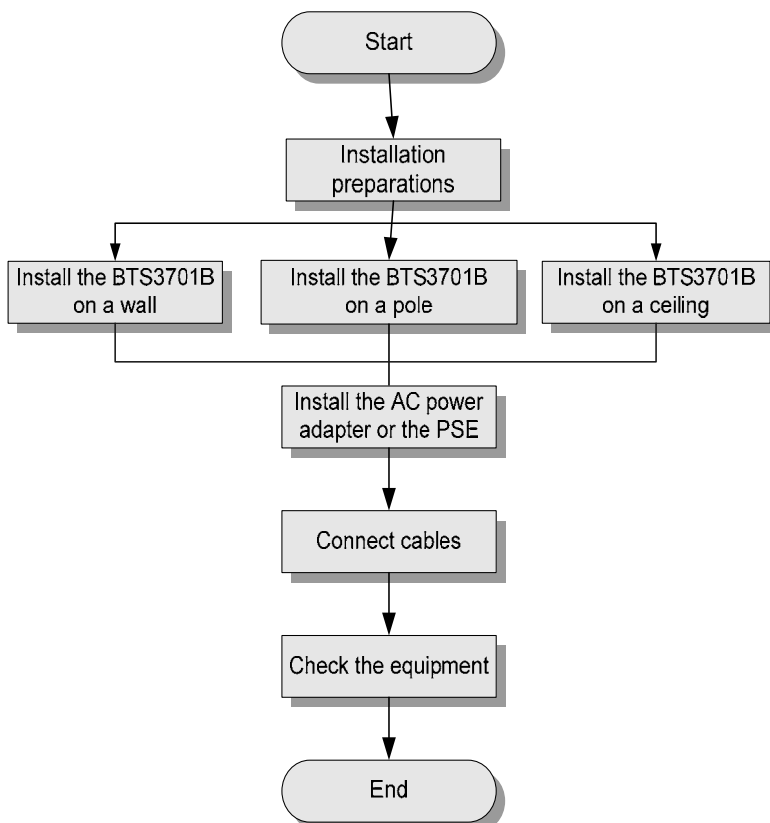
- Directly contacting or indirectly contacting high voltage power supply through wet objects is lethally dangerous.
- Incorrect high voltage operations will cause incidents such as fire or a shock hazard.
- Never perform any high voltage AC operations or perform operations on a tower or a mast during a thunderstorm. It can be lethally dangerous.
- Any equipment must be grounded before it is connected to the power supply. Ungrounded equipment can be lethally dangerous.
- Never perform any hot-line operation.
- Strong RF signals are harmful to human health. Ensure that the transmit antennas are shut down before an antenna installation or maintenance operation on a tower or mast installed with multiple transmit antennas.
- During an operation involving optical cables, keep your eyes far away from optical output ports and do not directly look at the optical output ports with bare eyes.
- Take measures to prevent dusts from entering your respiratory tract or eyes when drilling holes.
- Before connecting cables to storage batteries, disconnect the storage batteries from the power supply. Otherwise, injuries may be incurred.
- When working aloft, take measures to prevent objects from falling.

■ Equipment Safety

- Before operating the equipment, check the electric continuity of the equipment that requires grounding to ensure that it is reliably grounded.
- The static electricity produced by human body may damage the static-sensitive components, such as LSI on boards. Take proper ESD prevention measures, for example, wear ESD wrist straps or gloves to prevent boards, modules, and electronic components from being destroyed by static of the human body.
- When operating storage batteries, prevent the battery short-circuiting and electrolyte overflow or leakage. The electrolyte corrodes metal objects and the boards, producing rust and causing board short-circuiting.

Installation Tools

			
Measuring tape	Marker	Hammer drill	Ladder
			
Vacuum cleaner	Adjustable wrench	Phillips screwdriver	Rubber mallet
			
Diagonal pliers	Level	Wire stripper	



NOTE

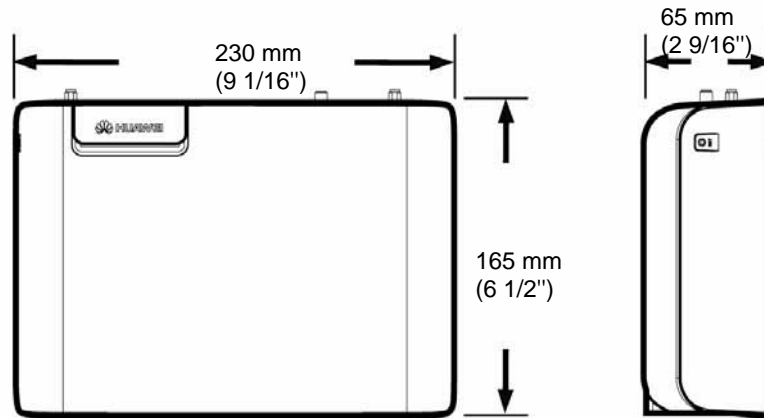
- When an external antenna is used, connect the antenna to the BTS3701B before installing the BTS3701B.
- When the BTS3701B is installed on a wall, the integrated mode is recommended.
- The BTS3701B must be installed at least 0.5 m (1'-7 11/16") away from the interference sources such as power supply and at least 2 m (6'-6 3/4") away from the high frequency radiation sources.

CAUTION

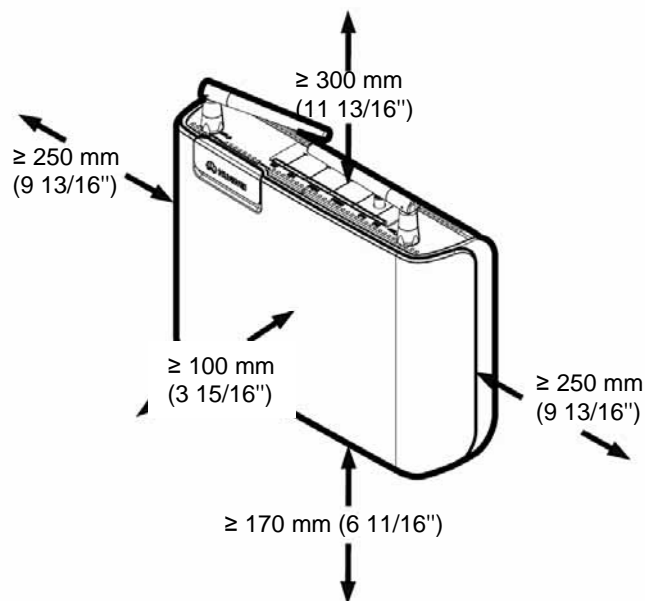
The BTS3701B cannot be placed horizontally on a flat object, such as a table.

Space Requirements

a Dimensions of the BTS3701B



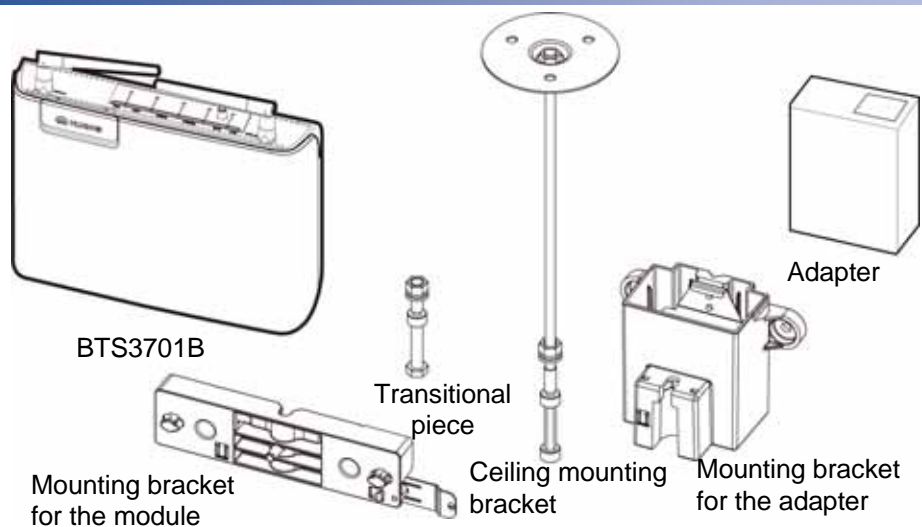
b Minimum Space Requirements



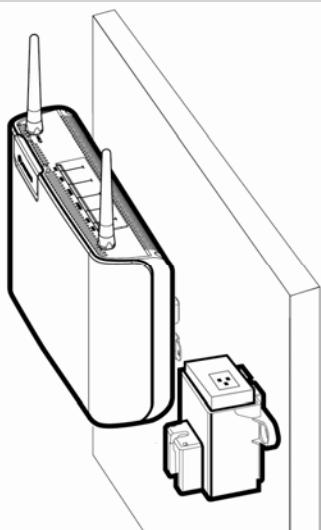
NOTE

A minimum of 500 mm (1'-7 11/16") should be reserved at the back of the BTS3701B only in the ceiling installation mode.

Installation Modes



a Installing the BTS3701B on a Wall (Separated Mode)

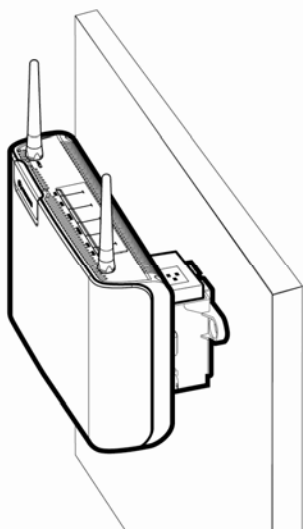


Regular installation



Reverse installation

b Installing the BTS3701B on a Wall (Integrated Mode)



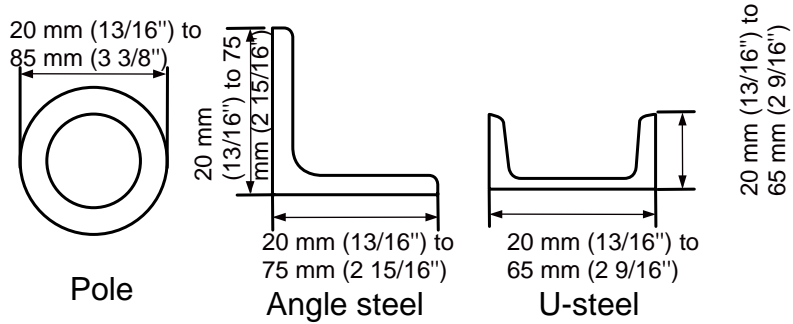
Regular installation



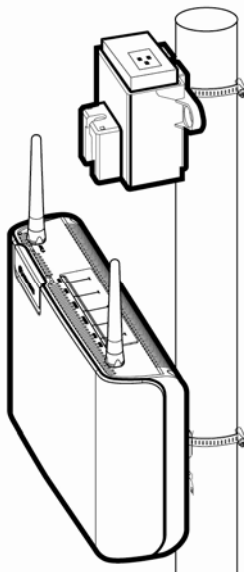
Reverse installation

Installation Modes

The requirements for the installation carrier are as follows:



C Installing the BTS3701B on a Pole (Separated Mode)

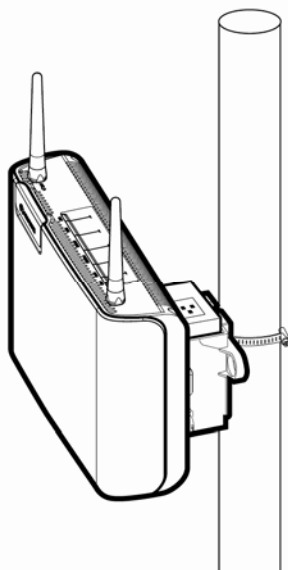


Regular installation



Reverse installation

d Installing the BTS3701B on a Pole (Integrated Mode)



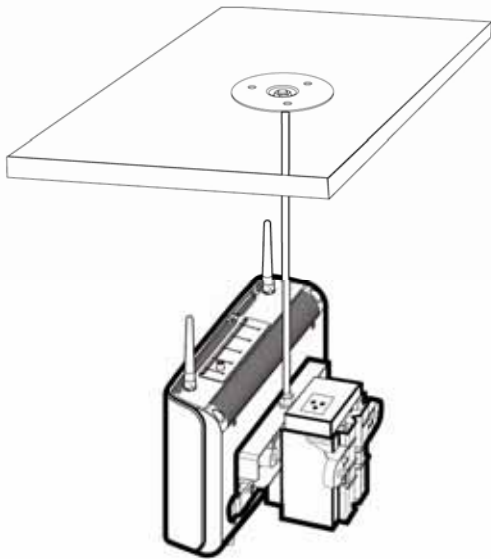
Regular installation



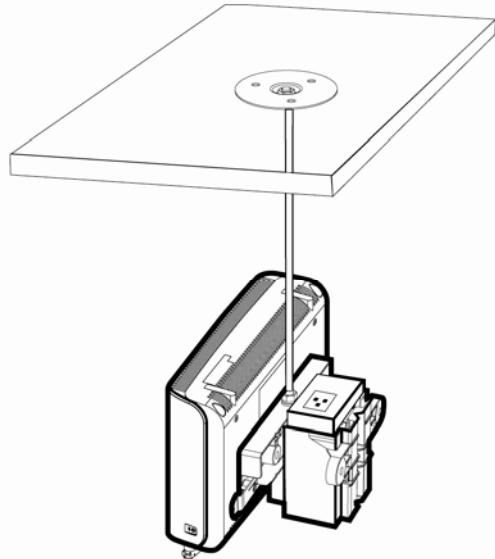
Reverse installation

Installation Modes

e Installing the BTS3701B on a Ceiling



Regular installation



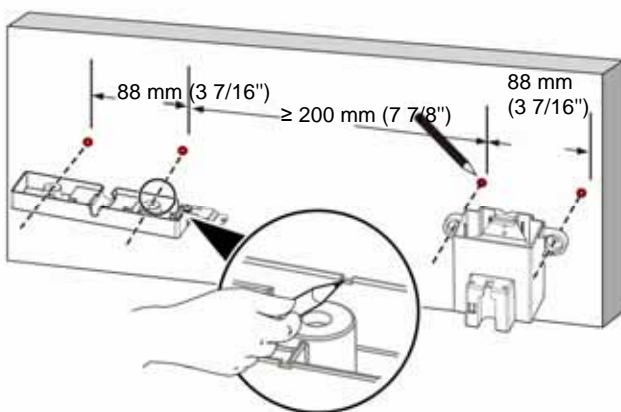
Reverse installation

NOTE

If the BTS3701B is installed on a ceiling, the ceiling must be made of concrete and can bear a weight of 323.6 N.m (2864.10 lbf.in.).

Installing the BTS3701B on a Wall

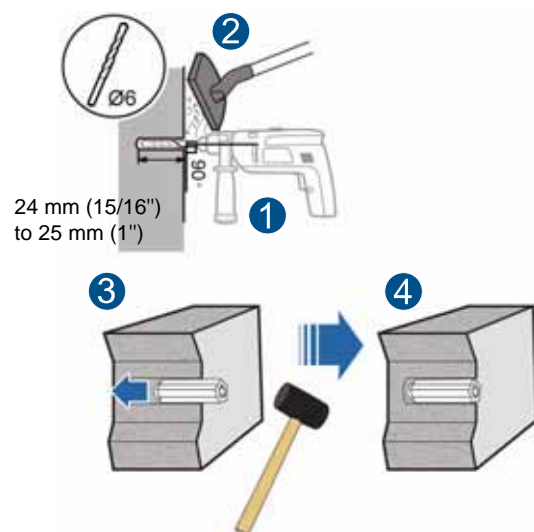
a Determining Installation Positions of the Mounting Brackets



NOTE

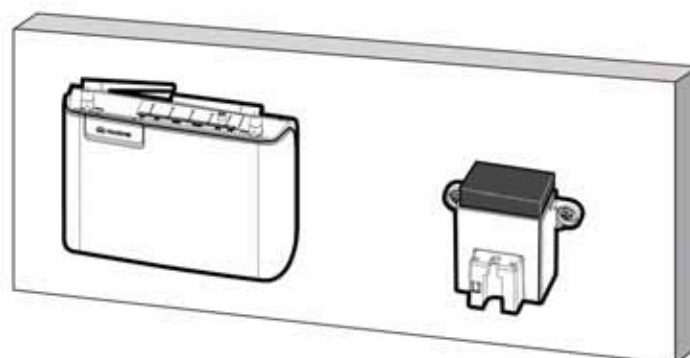
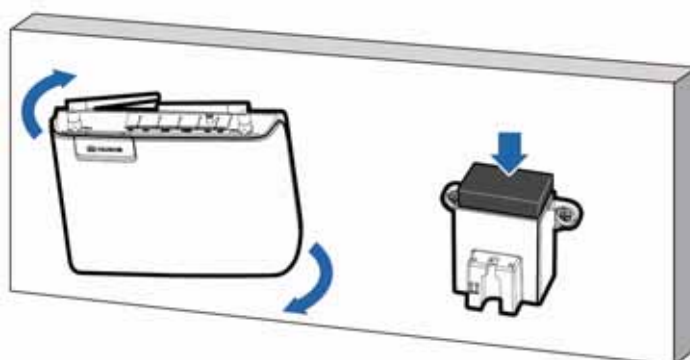
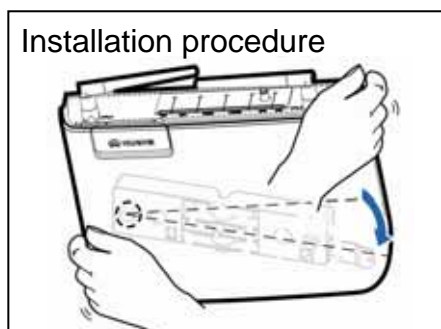
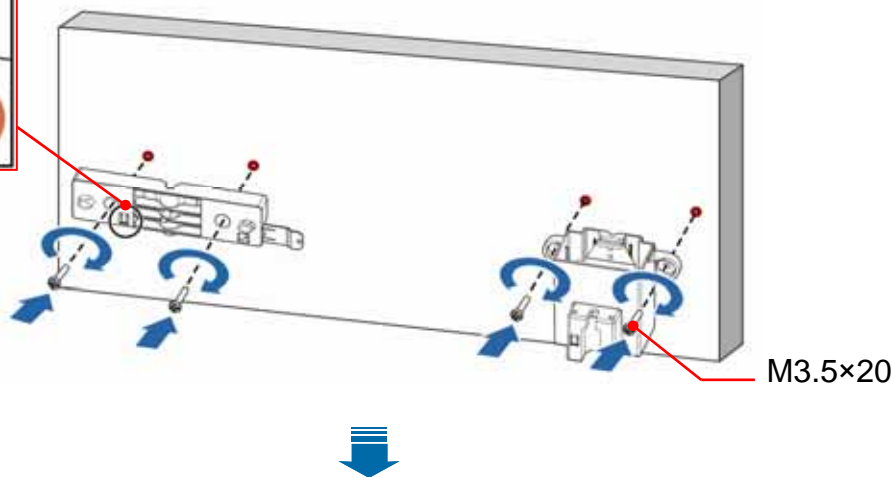
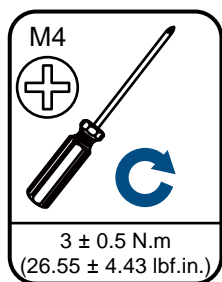
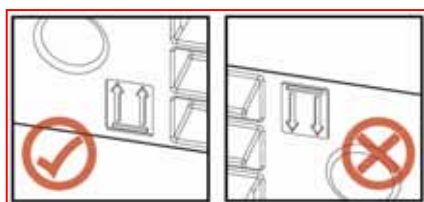
For the integrated installation mode, determine only the installation position of the adapter.

b Drilling Holes and Installing Expansion Bolts



Installing the BTS3701B on a Wall

C Separated Mode

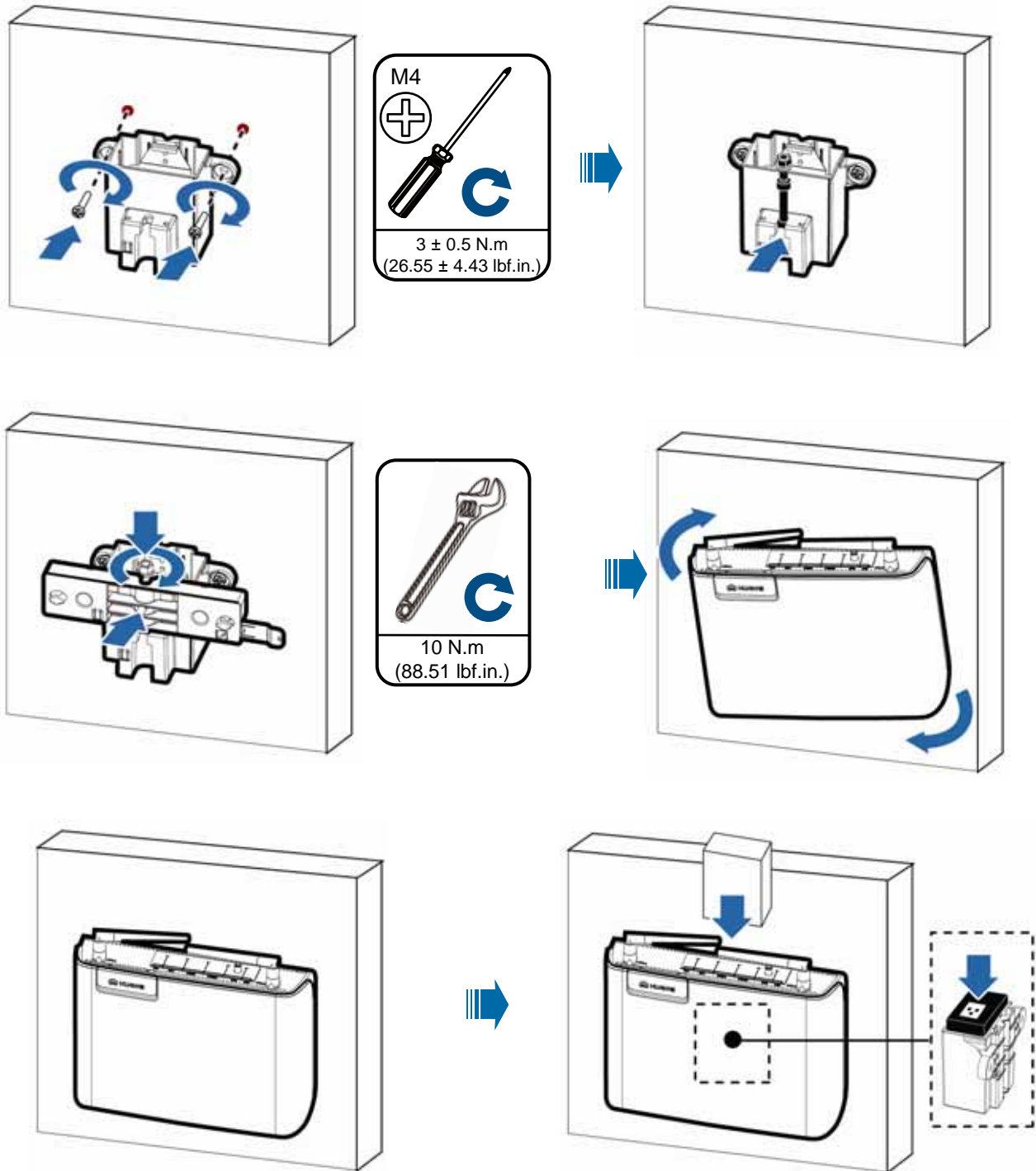


NOTE

The procedures of regular installation and reverse installation are identical.

Installing the BTS3701B on a Wall

d Integrated Mode

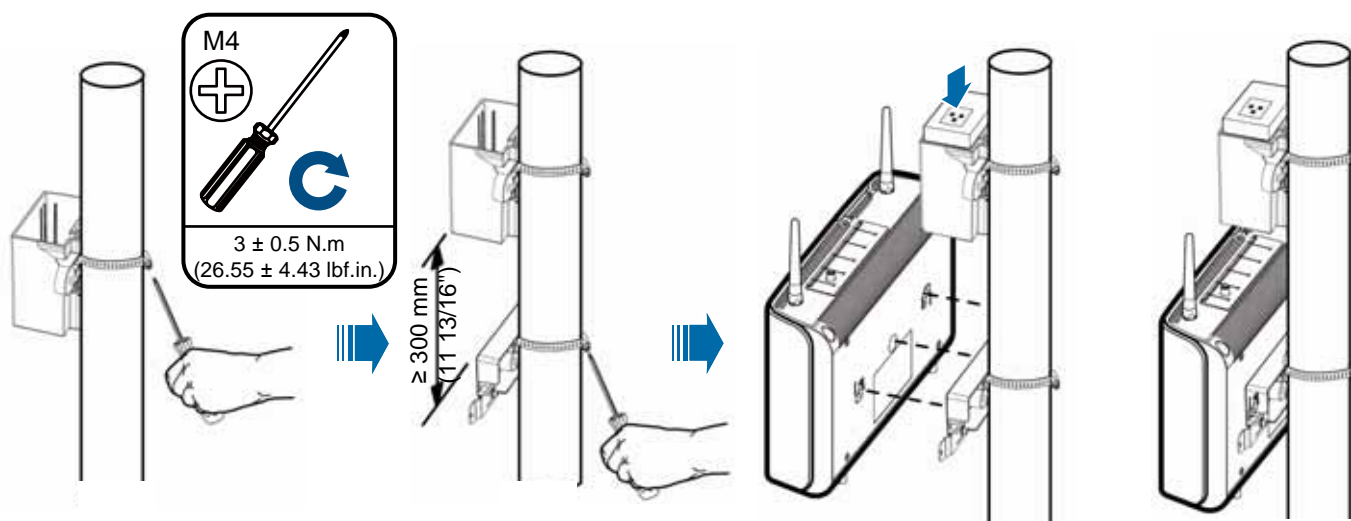


NOTE

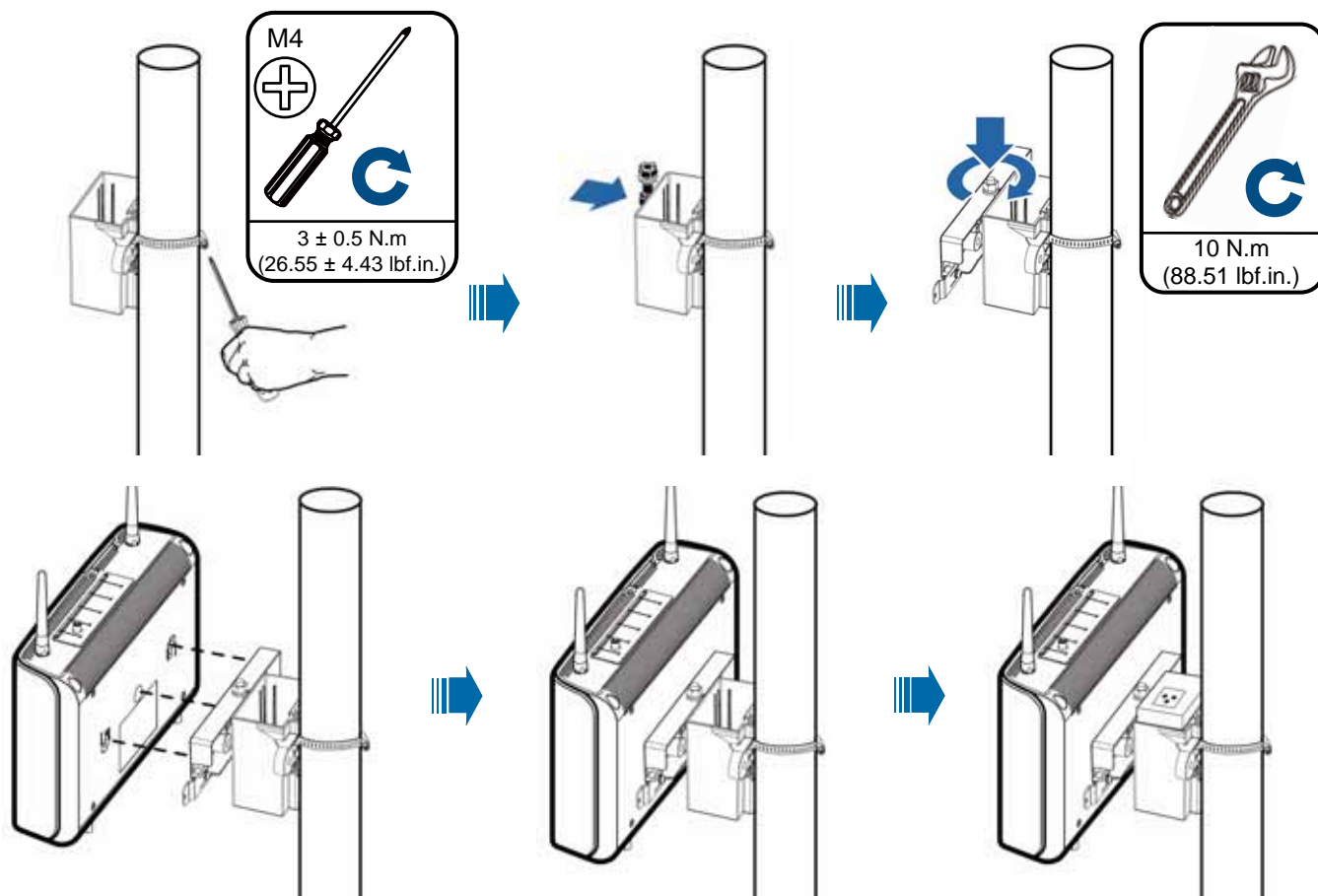
The procedures of regular installation and reverse installation are identical.

Installing the BTS3701B on a Pole

a Separated Mode



b Integrated Mode

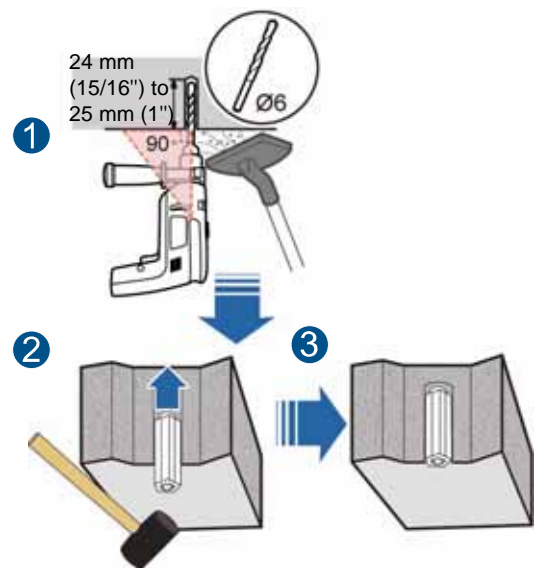
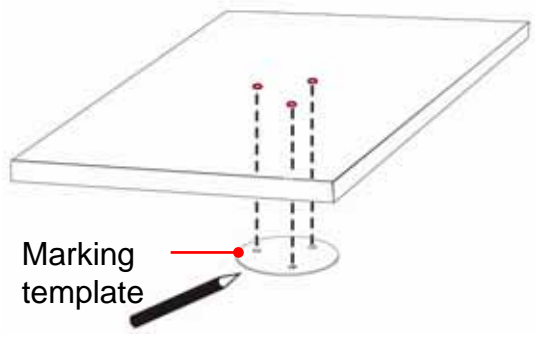


NOTE

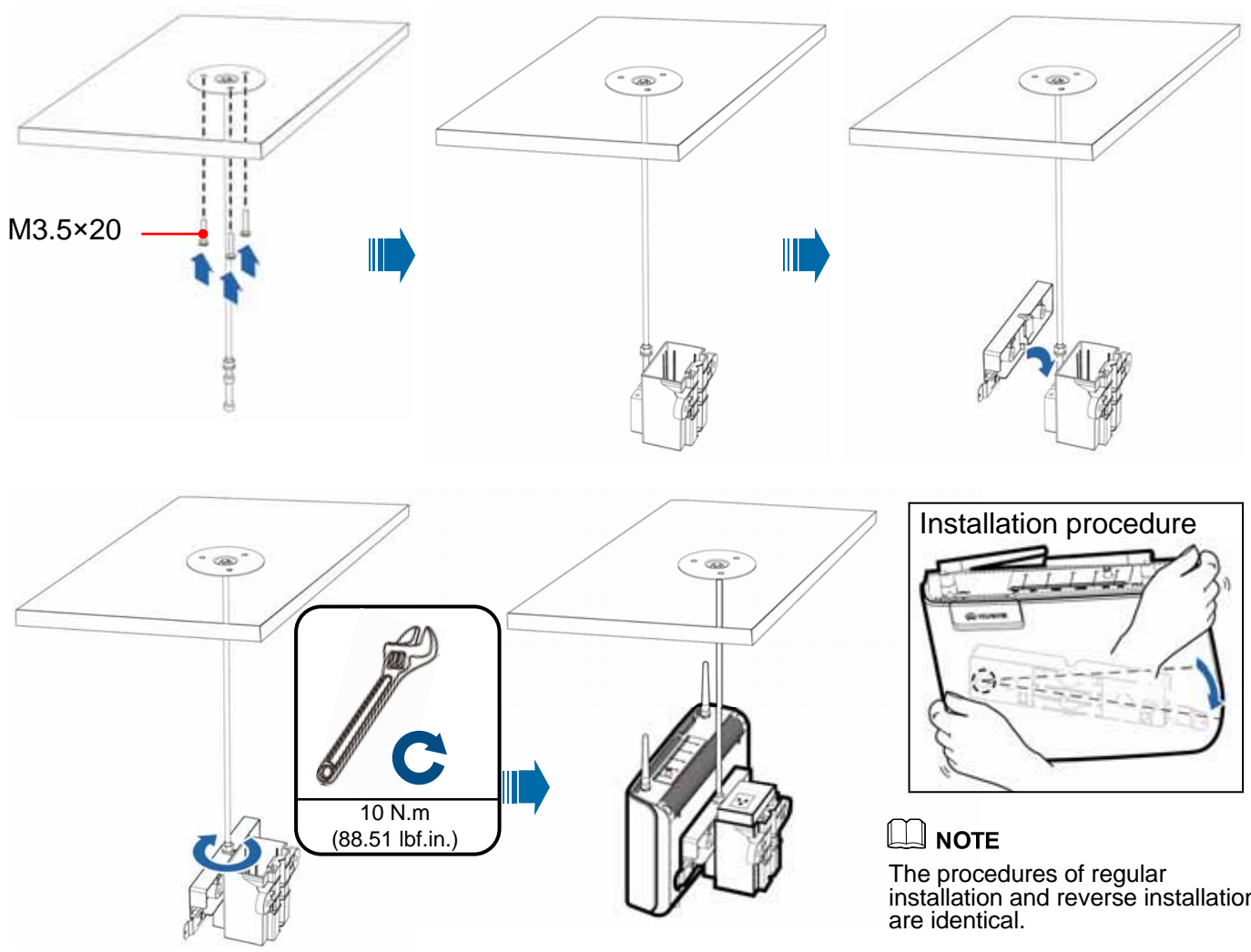
The procedures of regular installation and reverse installation are identical.

Installing the BTS3701B on a Ceiling

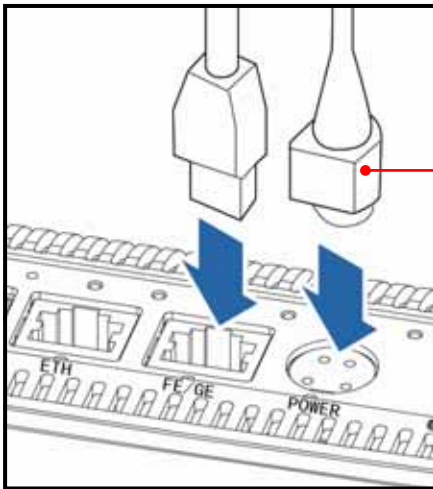
- a** Determining Installation Positions of Bolts
- b** Drilling Holes and Installing Expansion Bolts



C Installing the BTS3701B on a Ceiling



Connecting Cables



4-pin connector of the DC input power cable

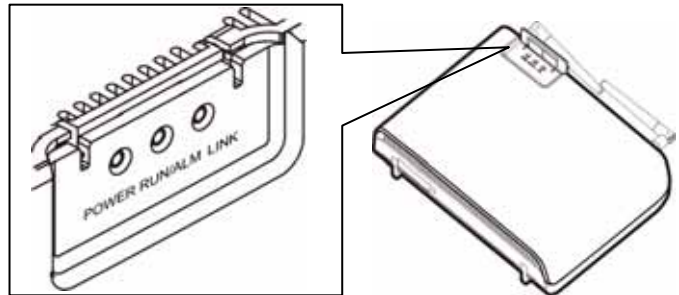
Cable	Connector	Connected to...
Straight-through cable	RJ45 connector	FE/GE port on the BTS3701B
	RJ45 connector	Operator's transmission equipment
Power cable	PA male connector	AC power wiring bar
	C7 female connector	Power adapter
DC input power cable	4-pin connector	PWR port on the BTS3701B
	The other end is connected to the power adapter.	

NOTE

If the delivered Ethernet cable [3 m (9'-10 1/8")] does not meet the requirement, prepare one on site based on actual requirements.

Powering On the BTS3701B

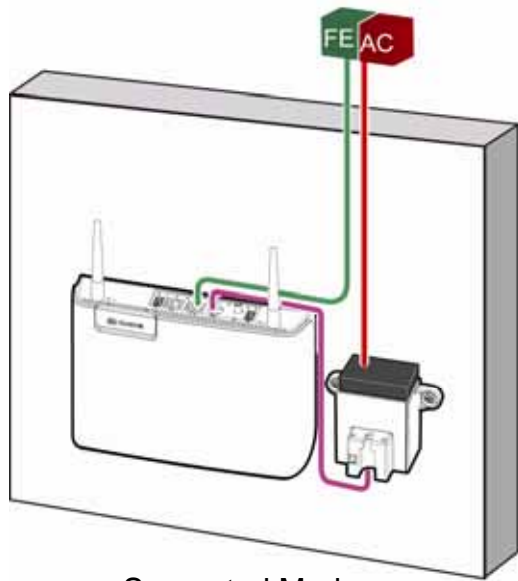
Connect the PA male connector to the AC power wiring bar to power on the BTS3701B.



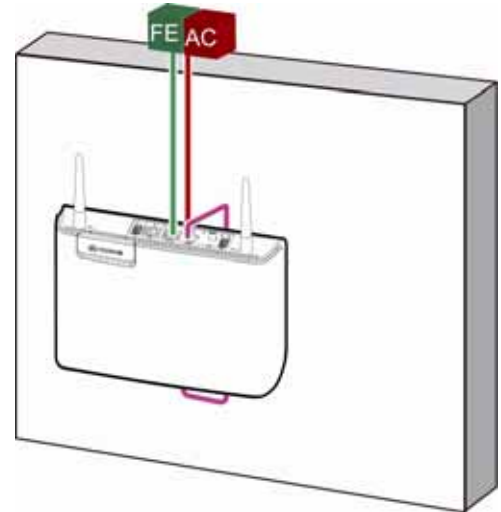
Indicator	Color	Status	Description
Power	Green	On	The power supply is normal.
		Off	There is no power supply, or the BTS3701B is faulty.
RUN/ALM	Red and green	Blinking at 0.5 Hz (green) (on for 1s, off for 1s)	The BTS3701B is running normally.
		Blinking at 4 Hz (green) (on for 0.125s, off for 0.125s)	The BTS3701B is being loaded, or the BTS3701B is not started.
		On (red)	An alarm is generated, and the BTS3701B needs to be replaced.
		Blinking at 0.5 Hz (red) (on for 1s, off for 1s)	An alarm is generated. Rectify the fault based on the reported alarm.
LINK	Green	On	The FE port is securely connected.
		Blinking at 4 Hz (green) (on for 0.125s, off for 0.125s)	Data is being transmitted and received over the FE port.
		Off	The FE port is insecurely connected.

Appendix: Cabling Routes for Different Installation Modes

a Installing the BTS3701B on a Wall



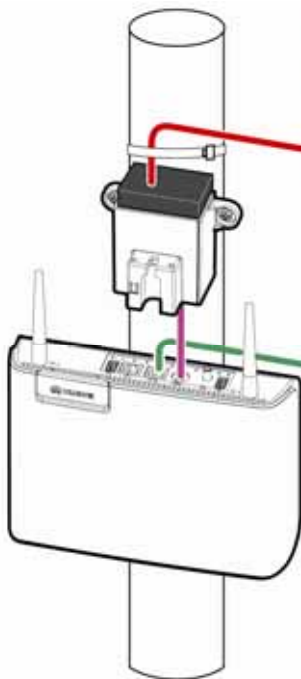
Separated Mode



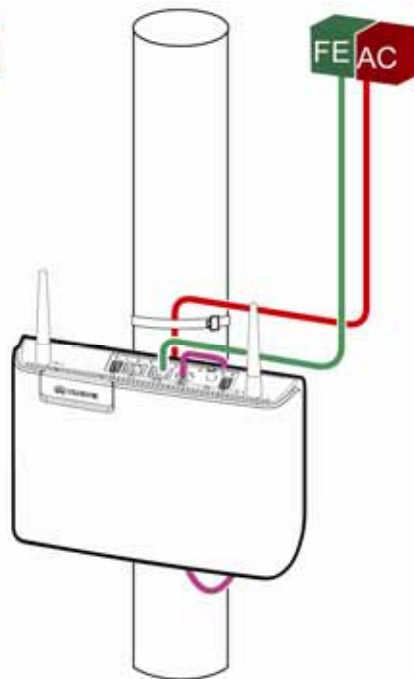
Integrated Mode

b Installing the BTS3701B on a Pole

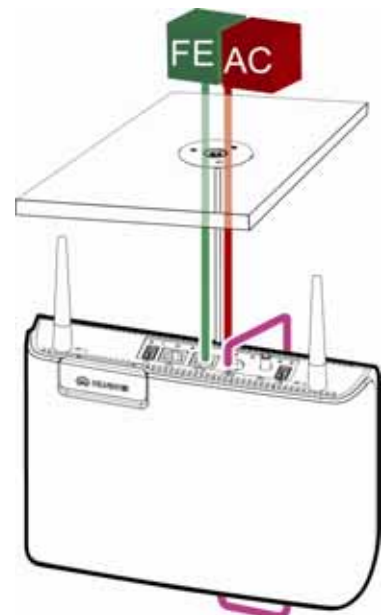
c Installing the BTS3701B on a Ceiling



Separated Mode



Integrated Mode

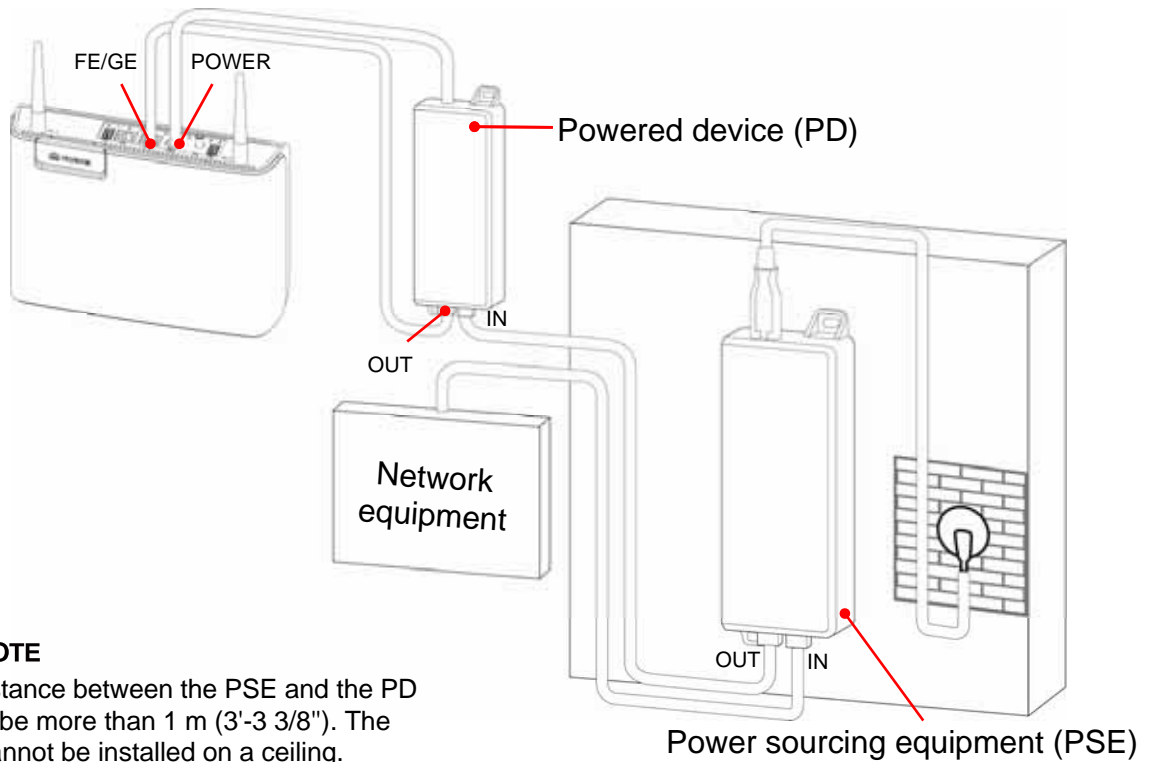


- Straight-through cable
- DC input power cable
- Power cable

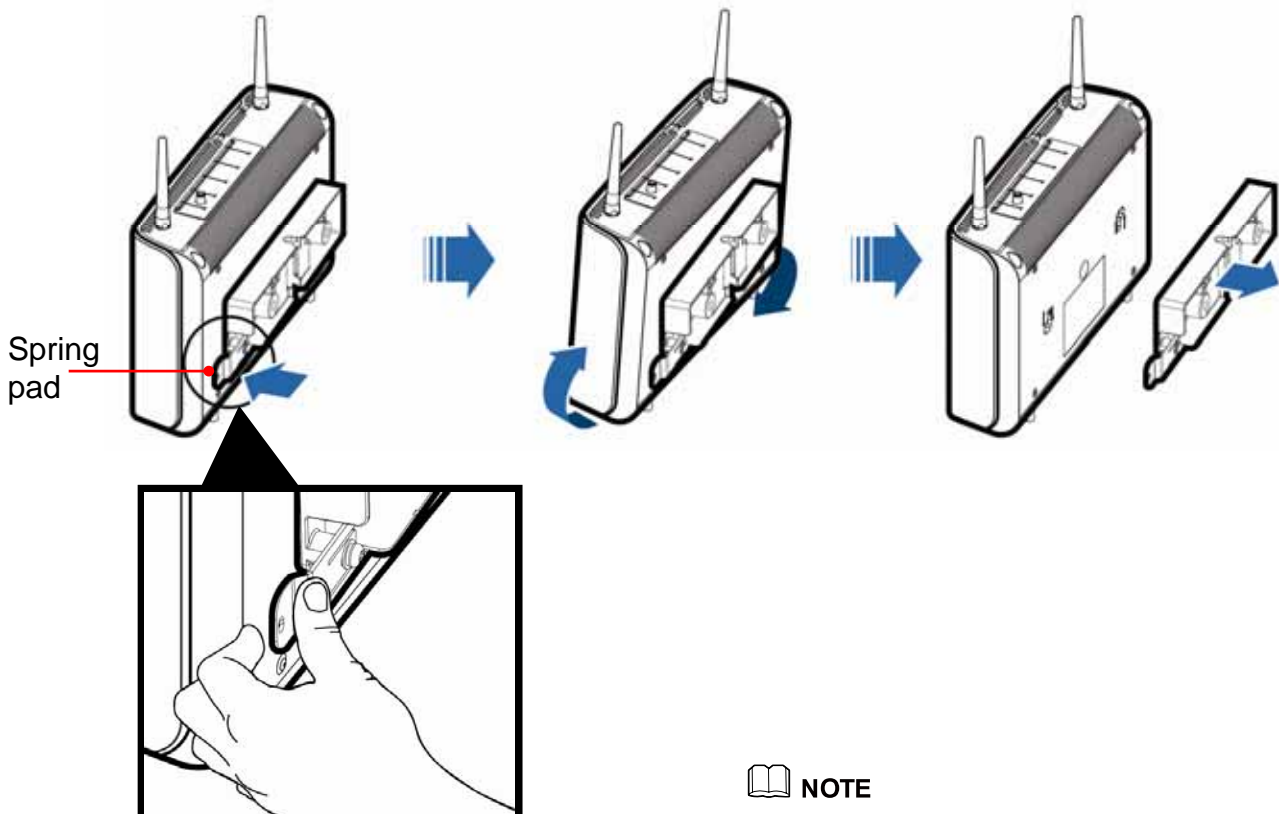
NOTE

- When the BTS3701B is installed on a pole, fix the input power cable of the power adapter on the pole using a tie wrap.
- Before powering on the equipment, ensure that the antenna of the BTS3701B is vertical.

e Installing the External Equipment



Appendix: Removing the Equipment



Huawei Technologies Co., Ltd.
Administration Building, Huawei Technologies
Co., Ltd., Bantian, Longgang District, Shenzhen,
P. R
Zip code: 518129
www.huawei.com