

About This Document

Overview

After the BTS deployment and service inspection and acceptance, the BTS enters service. You need to perform routine maintenance to ensure that the BTS runs in good conditions.

This document mainly describes the routine maintenance items of the BTS3012 hardware, including the equipment room, cabinet, power supply system, grounding system, and antenna system. The document also describes how to replace parts, modules, boards, and cables of the BTS3012.

Versions

The following table lists the versions of the product that is described in this document.

Product Names	Versions
BTS3012	V300R004
	V300R005
	V300R006

Intended Audience

This document (guide) is intended for the following engineers:

- Technical support engineers
- Maintenance engineers

Change History

Refer to [Changes in BTS3012 Site Maintenance Guide](#).

Organization

1 Safety Precautions

This section describes the safety precautions to be taken while installing and maintaining the Huawei network equipment.

2 Preparations for Site Maintenance

The preparations for site maintenance are obtaining site information, selecting maintenance items, and arranging maintenance tools and spare parts.

3 BTS3012 Hardware Maintenance

BTS3012 hardware maintenance refers to the maintenance of the equipment room environment, cabinets, power supply, grounding system, and antenna system of the BTS3012.

4 Powering On and Powering Off a BTS3012 Cabinet

This topic describes how to power on and power off a BTS3012 cabinet. The topic includes power-on, normal power-off, and emergency power-off of a BTS3012 cabinet.

5 Installing the BTS3012 Boards and Modules (Capacity Expansion)

The capacity expansion consists of the hardware installation on the BTS side and the data configuration on the BSC side. After installing hardware on the BTS side, you need to configure data on the LMT on the BSC side. The boards and modules involved in the capacity expansion of the BTS3012 are the DDPU, DCOM, DTRU, DFCU, DFCB, and DELC.

6 Installing the Combined BTS3012 Cabinets and BTS3012 Cabinet Groups (Capacity Expansion)

The capacity expansion through combined cabinets or cabinet groups disrupts the services carried by the BTS.

7 Replacing the BTS3012 Boards and Modules

The BTS3012 boards that can be replaced are the DTMU, DCCU, DCSU, DATU, DEMU, DELC, DMLC, and DSAC. The BTS3012 modules that can be replaced are DTRU, DDPU, DCOM, DFCU, and DFCB.

8 Cleaning the Parts of a BTS3012 Cabinet

In the BTS3012 cabinet, the fan box and the air filter have to be cleaned periodically.

9 Replacing the Parts of a BTS3012 Cabinet

The parts of the BTS3012 cabinet include the fan box, air filter, and busbar power switch.

10 Replacing the Parts of the Antenna System

The parts of the antenna system are antennas, TMA, and feeders.






11 Replacing the BTS3012 Cables

BTS3012 cables are E1 cables, optical cables, power cables, signal cables, and indoor 1/2-inch jumpers.

Conventions

1. Symbol Conventions

The following symbols may be found in this document. They are defined as follows

Symbol	Description
 DANGER	Indicates a hazard with a high level of risk that, 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 that, if not avoided, could cause equipment damage, data loss, and performance degradation, or unexpected results.
 TIP	Indicates a tip that may help you solve a problem or save your time.
 NOTE	Provides additional information to emphasize or supplement important points of the main text.

2. General Conventions

Convention	Description
Times New Roman	Normal paragraphs are in Times New Roman.
Boldface	Names of files,directories,folders,and users are in boldface . For example,log in as user root .
<i>Italic</i>	Book titles are in <i>italics</i> .
Courier New	Terminal display is in Courier New.

3. Command Conventions

Convention	Description
Boldface	The keywords of a command line are in boldface .
<i>Italic</i>	Command arguments are in <i>italic</i> .
[]	Items (keywords or arguments) in square brackets [] are optional.
{x y ...}	Alternative items are grouped in braces and separated by vertical bars.One is selected.
[x y ...]	Optional alternative items are grouped in square brackets and separated by vertical bars.One or none is selected.
{ x y ... } *	Alternative items are grouped in braces and separated by vertical bars.A minimum of one or a maximum of all can be selected.

Convention	Description
[x y ...] *	Alternative items are grouped in braces and separated by vertical bars. A minimum of zero or a maximum of all can be selected.

4. GUI Conventions

Convention	Description
Boldface	Buttons, menus, parameters, tabs, window, and dialog titles are in boldface . For example, click OK .
>	Multi-level menus are in boldface and separated by the ">" signs. For example, choose File > Create > Folder .

5. Keyboard Operation

Convention	Description
Key	Press the key. For example, press Enter and press Tab .
Key1+Key2	Press the keys concurrently. For example, pressing Ctrl+Alt+A means the three keys should be pressed concurrently.
Key1,Key2	Press the keys in turn. For example, pressing Alt,A means the two keys should be pressed in turn.

6. Mouse Operation

Action	Description
Click	Select and release the primary mouse button without moving the pointer.
Double-click	Press the primary mouse button twice continuously and quickly without moving the pointer.
Drag	Press and hold the primary mouse button and move the pointer to a certain position.