

# Nokia UltraSite EDGE BTS IDCA Installation Quick Reference Guide

## Introduction

This guide provides a quick reference for installing the Nokia UltraSite EDGE BTS indoor cabinet (IDCA). Instructions for the following GSM/EDGE configurations are included in this guide:

1+1+1 combining bypass

2+2+2 combining bypass

3+3+3 two-way WBC

4+4+4 two-way WBC

Please read *Nokia UltraSite EDGE BTS User Manual* carefully before installing or commissioning the BTS. Instructions given in the User Manual take precedence.

## Contents

1. Checking the delivery contents
2. Viewing the indoor cabinet
3. Checking cabinet clearances
4. Mounting the cabinet
5. Cabling the cabinet
6. Installing and cabling the BTS units

Once the installation is completed, the BTS is ready to be powered up and commissioned. For detailed instructions and a complete installation checklist, see *Nokia UltraSite EDGE BTS User Guide*.



### Warning

The FXC-STM-1 is laser class 1. For more information, see UltraSite EDGE BTS User Manual.

UltraSite EDGE BTS has many sharp edges. Exercise caution during installation.

When drilling, wear the necessary protective gear, such as gloves and safety glasses.

The cabinet is heavy. Additional personnel or lifting equipment may be required when the cabinet is moved, unpacked, or lined up. Avoid tilting the cabinet forward. Internal components, such as cables, may fall out. In addition, follow any local regulations applicable to the installation.

Danger of lethal voltages! Make sure that the equipment is earthed (grounded) correctly and that all earth (ground) connections are secure and irremovable before connecting the power cables.



### Caution

Nokia requires that personnel who perform installation tasks have basic knowledge of base station systems and equipment.

If the installation site is in an area affected by seismic activity, follow the earthquake mounting instructions.

Always use the antistatic wrist strap when handling units marked with the ESD sign.

The information in this document is subject to change without notice and describes only the product defined in the introduction of this documentation. This document is intended for the use of Nokia's customers only for the purposes of the agreement under which the document is submitted, and no part of it may be reproduced or transmitted in any form or means without the prior written permission of Nokia. The document has been prepared to be used by professional and properly trained personnel, and the customer assumes full responsibility when using it. Nokia welcomes customer comments as part of the process of continuous development and improvement of the documentation.

The information or statements given in this document concerning the suitability, capacity, or performance of the mentioned hardware or software products cannot be considered binding but shall be defined in the agreement made between Nokia and the customer. However, Nokia has made all reasonable efforts to ensure that the instructions contained in the document are adequate and free of material errors and omissions. Nokia will, if necessary, explain issues that may not be covered by the document.

Nokia's liability for any errors in the document is limited to the documentary correction of errors. **NOKIA WILL NOT BE RESPONSIBLE IN ANY EVENT FOR ERRORS IN THIS DOCUMENT OR FOR ANY DAMAGES, INCIDENTAL OR CONSEQUENTIAL (INCLUDING MONETARY LOSSES),** that might arise from the use of this document or the information in it.

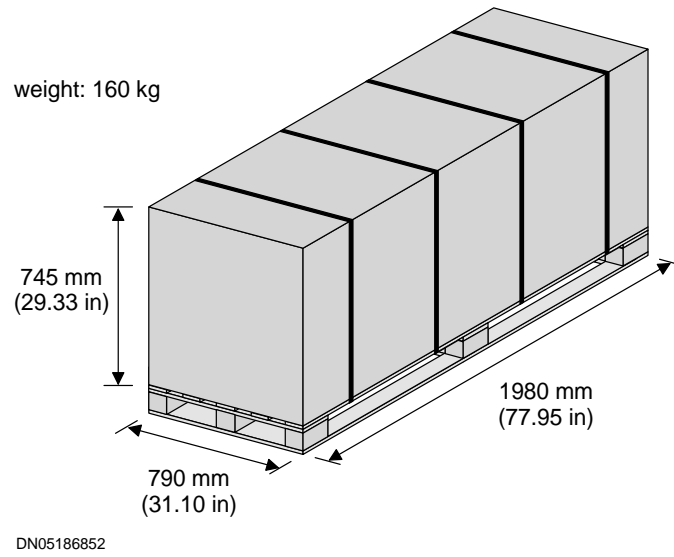
This document and the product it describes are considered protected by copyright according to the applicable laws.

NOKIA logo is a registered trademark of Nokia Corporation.

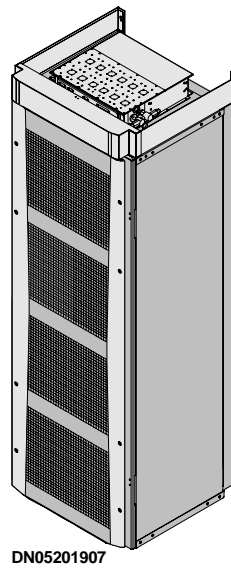
Other product names mentioned in this document may be trademarks of their respective companies, and they are mentioned for identification purposes only.

Copyright © Nokia Corporation 2005. All rights reserved.

## 1. CHECKING THE DELIVERY CONTENTS



## 2. VIEWING THE INDOOR CABINET



**Front view**

1800 mm (70.1 in)

**Plan view**

600 mm (23.6 in)

570 mm (22.4 in)

900 mm (35.4 in)

DN05186888

Diagram illustrating the front elevation of the test specimen, showing dimensions and the location of earthquake anchor holes (X).

**Dimensions:**

- Top width segments: 71.5 mm (2.8 in), 457 mm (18.0 in), 71.5 mm (2.8 in)
- Back stop height: 179 mm (7.0 in)
- Front width: 600 mm (23.6 in)
- Front height segments: 300 mm (11.8 in), 570 mm (22.4 in)
- Total front height: 620 mm (24.4 in)

**Anchor Hole Locations (X):**

- Four locations are marked with 'X' on the front face of the specimen.
- Two locations are marked with 'X' on the top face of the specimen.

**Labels:**

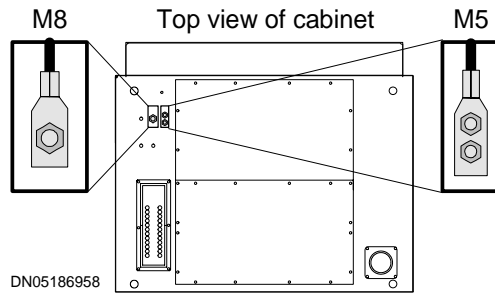
- Facility wall
- Back stop
- Front

X - Location of earthquake anchor holes

DN05186919

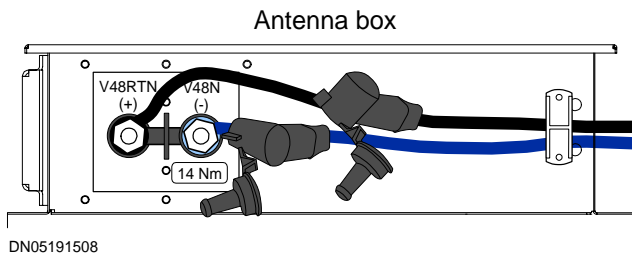
## 5. CABLING THE CABINET

①

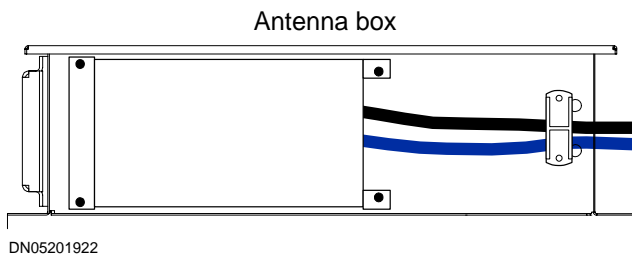


1. Ground the cabinet.
2. Connect the -48 VDC cables.
3. Install the -48 VDC filter terminal cover.

②

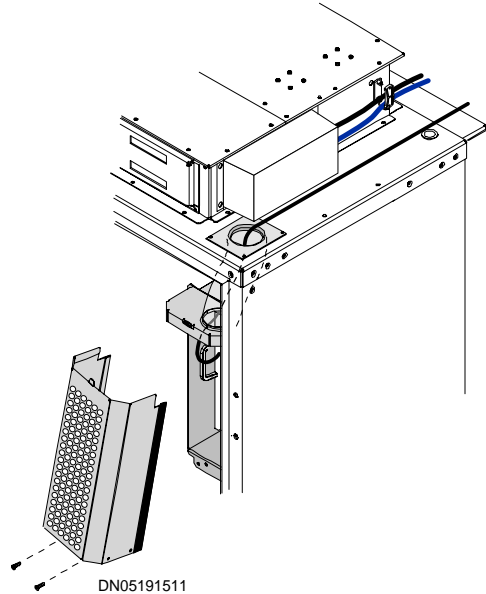


③



## 5. CABLING THE CABINET (CONTINUED)

④

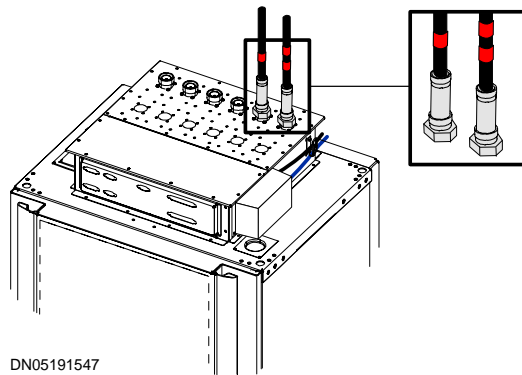


4. Route the transmission cable.

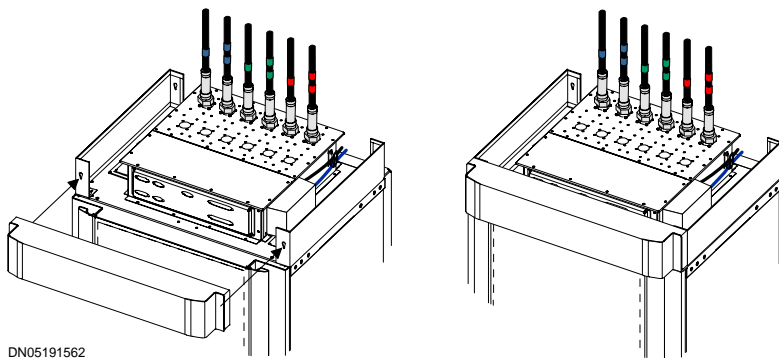
5. Connect the external antenna cables.

6. Install the roof and side plates.

⑤

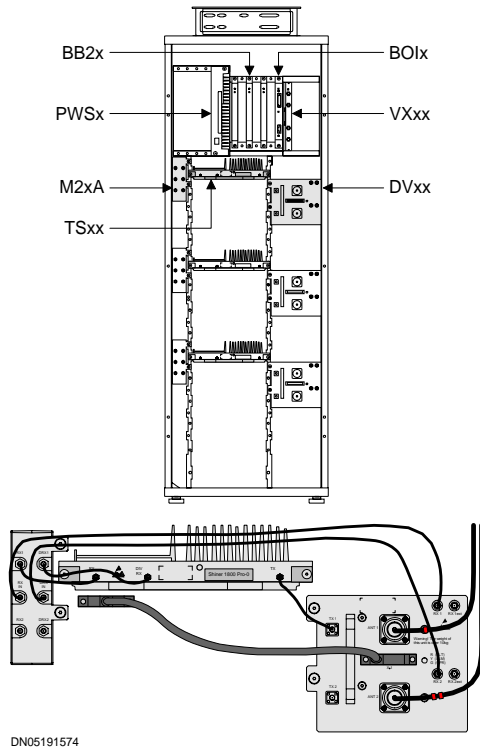


⑥



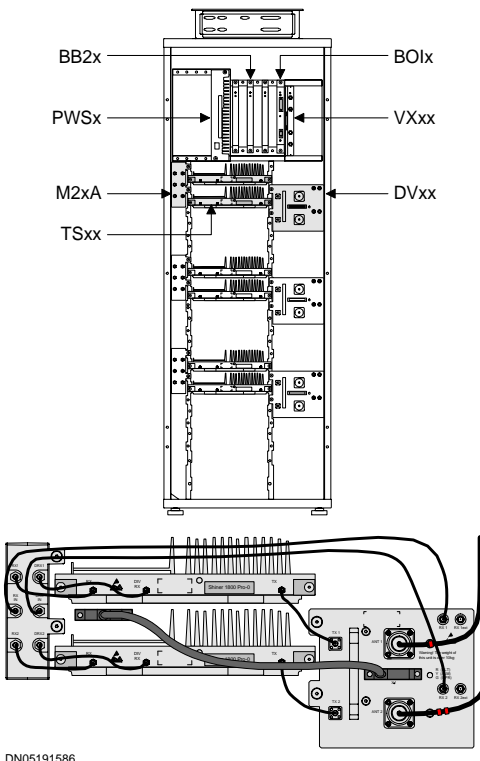
## 6. INSTALLING AND CABLING THE BTS UNITS

### 1+1+1 combining bypass



1. Install the units.
2. Install the baseband cables.
3. Install the RF cables.
4. Connect the transmission cable(s) to the VXxx unit and replace the cover.
5. Connect the pre-installed internal antenna cables to the DVxx units.

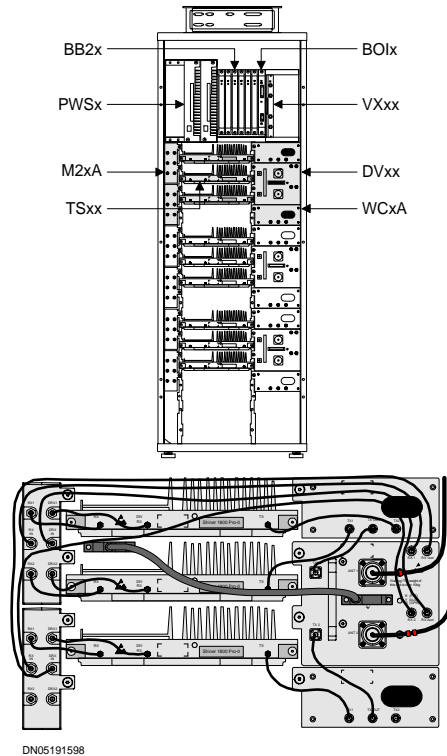
### 2+2+2 combining bypass



1. Install the units *except* the TSxx units.
2. Install the baseband cables.
3. Install the TSxx units.
4. Install the RF cables.
5. Connect the transmission cable(s) to the VXxx unit and replace the cover.
6. Connect the pre-installed internal antenna cables to the DVxx units.

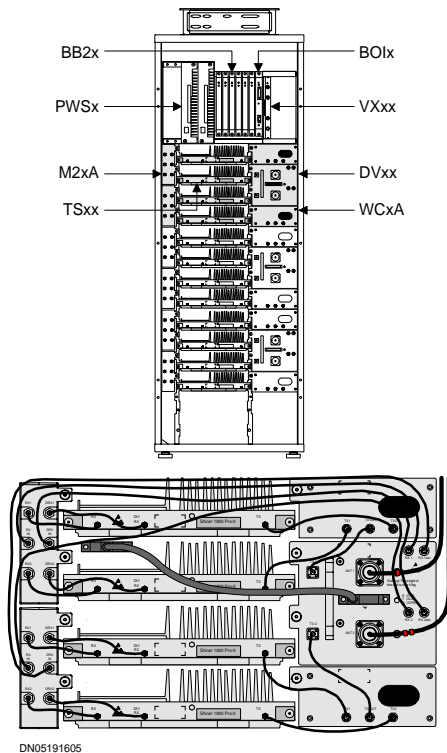
## 6. INSTALLING AND CABLING THE BTS UNITS (CONTINUED)

### 3+3+3 two-way WBC



1. Install the units *except* the TSxx units.
2. Install the baseband cables.
3. Install the TSxx units.
4. Install the RF cables.
5. Connect the transmission cable(s) to the VXxx unit and replace the cover.
6. Connect the pre-installed internal antenna cables to the DVxx units.

### 4+4+4 two-way WBC



1. Install the units *except* the TSxx units.
2. Install the baseband cables.
3. Install the TSxx units.
4. Install the RF cables.
5. Connect the transmission cable(s) to the VXxx unit and replace the cover.
6. Connect the pre-installed internal antenna cables to the DVxx units.