

NOKIA

Nokia MetroSite EDGE Base Station

Guide to Documentation

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CE 0523 ⓘ	<p>Hereby, Nokia Corporation, declares that this product is in compliance with the essential requirements and other relevant provisions of Directive: 1999/5/EC.</p> <p>The product is marked with the CE marking and Notified Body number according to the Directive 1999/5/EC</p>
FCC	<p>FCC §15.21 - Information to user - This product is used as an intentional radiated equipment and any changes or modifications on the equipment without any approval by Nokia could void the user's authority to operate the equipment.</p> <p>FCC §15.105 - Information to user - This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:</p> <ul style="list-style-type: none">• Reorient or relocate the receiving antenna.• Increase the separation between the equipment and receiver.• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.• Consult the dealer or an experienced radio/TV technician for help.

For the MetroSite EDGE to be used in the USA and continue to meet the FCC certification granted, it must be noted that the following channels are either blocked, or can not be operated at a higher power level than stated below.

For use in the GSM 800 band

Channel 128 - For GMSK, Maximum Power Level 3 - For 8PSK (EDGE), Maximum Power Level 4

Channel 182 - Blocked for both GMSK and 8PSK (EDGE)

Channel 232 - Blocked for both GMSK and 8PSK (EDGE)

Channel 239 - For GMSK, Maximum Power Level 13 - For 8PSK (EDGE), transmission is Blocked

Channel 240 - For GMSK, Maximum Power Level 13 - For 8PSK (EDGE), transmission is Blocked

Channel 251 - For GMSK, Maximum Power Level 1

For use in the GSM 1900 band

Channel 586 - Blocked for both GMSK and 8PSK (EDGE)

Channel 611 - Blocked for both GMSK and 8PSK (EDGE)

Channel 686 - Blocked for both GMSK and 8PSK (EDGE)

Channel 711 - Blocked for both GMSK and 8PSK (EDGE)

Channel 736 - Blocked for both GMSK and 8PSK (EDGE)

If these channels are not blocked, or operated at the stated reduced power or lower power, then the FCC certification will be invalid.

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1 About this document

This document describes the scope, structure, and use of the Nokia MetroSite EDGE Base Station (BTS) Product Documentation Set (User Manual) which is also a subset of Nokia MetroSite solution documentation.

This document describes the generic customer documents which are produced by the Nokia MetroSite EDGE Base Station manufacturer. Customer-specific documents are not described here.

This document is a source for the following information:

- navigation aid for finding the desired information
- general contents of each document
- accessing (ordering) the product documentation set
- delivery media
- conventions used in this manual
- how to give feedback

Readership

This manual is for the application planning, installation and commissioning personnel of the Nokia MetroSite EDGE Base Station. The reader is assumed to have a basic knowledge of base station equipment and systems.

1.1 Other related documentation

The following documentation is related to this product documentation set, but not included in it:

- Nokia MetroSite EDGE Base Station System Overview
- Nokia MetroSite EDGE GSM Base Station Product Overview
- Nokia MetroSite EDGE Solution Accessories document

- Nokia CX 3.3 (or later) Software Release Binder
- Nokia MetroHub Transmission Node User Manual
- Nokia MetroHopper with FXC RRI User Manual
- Nokia FlexiHopper with FXC RRI User Manual
- Nokia MetroSite Battery Backup User Manual

2 Guide to Nokia MetroSite EDGE Base Station Product Documentation Set

2.1 Navigation aid

This section helps you find the documents that you need in order to accomplish a certain task. The tasks are sorted in alphabetical order.

Note

Detailed information on the contents and functionality of the BTS software and alarm information can be found in the Software Release Binder.

Note

Detailed instructions on how to use Nokia BTS Manager are given in the Nokia BTS Manager on-line Help.

Table 1. Navigation aid for the product documentation set documents

Information on	Is found in
Cables and connectors	Product Description (connectors on the units)
Commissioning Nokia MetroSite EDGE Base Station	Commissioning Nokia BTS Manager on-line Help
Features of the Nokia MetroSite EDGE Base Station	Product Description
Installing the Nokia MetroSite EDGE Base Station	Requirements for Installation and Operation Installation

Table 1. Navigation aid for the product documentation set documents

Information on	Is found in
Maintaining the Nokia MetroSite EDGE Base Station	Maintenance Nokia BTS Manager on-line Help
Managing the Nokia MetroSite EDGE Base Station locally	Product Description (brief overview of Nokia BTS Manager) Commissioning (how to get started with the Nokia BTS Manager) Nokia BTS Manager on-line Help
Planning the application/installation	Warnings and Cautions Product Description Requirements for Installation and Operation
Standards	Product Description (all standards) Requirements for Installation and Operation (environmental standards)
Technical specifications	Product Description
Terminology	Glossary
Tools (used in installation and maintenance)	Requirements for Installation and Operation Installation
Upgrading the Nokia MetroSite EDGE Base Station	Maintenance Field Upgrade
How to locate information on procedures, main tasks, features, terms, operation, units of the BTS, and the BTS in general.	Index

2.2 Contents by documents

This section describes the general contents of individual documents in this product documentation set (user manual).

Warnings and Cautions

- definition of a warning and a caution
- warnings and cautions concerning handling and using Nokia MetroSite EDGE Base Stations
- safety distance calculations

Glossary

- technical abbreviations and acronyms used in this manual
- other technical key terms used in this manual

Product Description

- description of features
- description of BTS applications
- description of software
- description of construction, plug-in units and their functionality
- technical specifications and standards

Requirements for Installation and Operation

- environmental specifications
- general requirements for the site
- space requirements and mounting locations
- requirements for grounding and site power supply
- site power consumption
- list of tools needed for the installation

Installation

- contents of the delivery
- unpacking instructions
- installation equipment
- wall mounting instructions
- pole mounting instructions
- cabinet cabling instructions

Field Upgrade

- upgrade types and required parts
- power precautions when working on the BTS
- unit removal procedures
- unit installation procedures

Commissioning

- commissioning software overview
- getting started with Nokia BTS Manager
- manual commissioning with Commissioning Wizard
- Traffic Manager
- line interface and synchronization settings
- Radio Wizard
- cross-connections
- troubleshooting and fault reporting

Alarms Descriptions

- handling BTS alarms
- alarm examples
- list of alarm descriptions
- fault reporting
- troubleshooting for faults

Maintenance

- periodic maintenance measures
- LED indicator descriptions
- 13 MHz clock adjustment
- instructions for replacing units
- instructions for expanding the BTS's capacity
- troubleshooting for faults

Index

- A retrieval aid for locating information on procedures, main tasks, features, terms, operation, units of the BTS, and the BTS in general.

2.3 Accessing product documentation sets

You can access Nokia product documentation through Nokia Online Services (NOLS). To order a user account for NOLS, contact your local Nokia representative.

2.3.1 Delivery media

In NOLS, you can select the MetroSite EDGE Base Station Product Documentation Set and view it with the NED browser. The NED browser has the following functions:

- Contents - browse the complete contents of the product documentation set
- PDF list - download and/or view the product documentation set in PDF format (the documentation set may be divided into several PDF files)
- Search / Advanced Search - search the product documentation set
- Glossary
- NED Help

Product documentation sets cannot be ordered from Nokia in paper format. However, you can produce your own paper documents by downloading and printing the PDF format from the NED browser in NOLS (see PDF list above).

2.4 Conventions used in documents

2.4.1 Identification of product documentation sets in PDF format

For identification and version management purposes, the PDF format documents in the product documentation set (user manual) are coded according to specific principles. The code and the version of the product documentation set can be found on the front page of the PDF document. The documents are further classified as described in Section 2.4.2 below.

2.4.2 Identification of PDF documents

All documents are identified by number, version, and language. These elements combined form a document identifier.

Example of a document identifier:

DN98123 issue 1-0 en

- *DN98123* is the document number.
- *1* is the issue number, which increases when the contents of the document are changed; *0* is the editorial number, which increases when the document format is corrected without changes being made to documents.
- *en* is the language code, taken from the ISO 639 standard.

In paper documents, the document identifier is in the lower left-hand corner of the page. In electronic documents, the document identifier can be viewed by clicking the icon in the upper right-hand corner at the beginning of each document. When the document is printed, the document identifier and name appear on each page.

2.4.3 Typographic conventions

Icons and different fonts are used to emphasise special elements of the document. The icons are located in the left-hand side of text.

Warnings

Warnings alert the reader to dangers which may cause loss of life, physical injury, or ill health.



WARNING

This is a warning!

Cautions

Cautions are used to indicate possible damage to equipment but not danger to personnel.



Caution

This is a caution!

Notes

Notes are used to call attention to a certain piece of information.

Note

This is a note.

Task sequences/procedures

The task sequence/procedure symbol is used to indicate the beginning of a task sequence.



Task sequence/procedure:

1. Step 1.
2. Step 2.
3. Step 3.

Text conventions

Table 2 lists the text conventions used in the documentation.

Table 2. Text type conventions in the product documentation set documents

Convention	Description
<i>italic font</i>	Used when mentioning the title of a manual, chapter or section. For example: Refer to <i>Test Call Handling, Command Reference Manual</i> . Used in MML (Man Machine Language) for names of user interface windows, such as: the <i>BTS Properties</i> window.
Courier font	Used in MML (Man Machine Language) coding examples, such as: Run:Test case;
CAPS	Used in MML (Man Machine Language) commands, such as: click FILE EXIT; or click the CANCEL button.
SMALL CAPS	keyboard short-cuts, such as CTRL+F7
bold	Used to emphasise text parts in electronic documents.

Index conventions

Index entries consist of the entry word, the name of the document in which information related to the entry can be found and the page number.

The following is an example of an index entry:

cable diameters *Requirements for Installation and Operation* **31, 34**

2.5 How to give feedback

We appreciate your feedback. Your comments are a valuable source of information for continuous improvement of our documentation. To provide feedback, please return the attached *feedback form* (Appendix A) to your local Nokia representative.

If you find any problems with our documentation, please contact your local Nokia representative.

Appendix A. Feedback Form

Table 3. Document feedback form

Document	Name:
	Document identifier:
	Document category:
Product	Name and version:
Sender	Your name:
	Job Title:
	Company:
	Address:
Your comments	

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