

# FM3101



## CONFIGURATION MANUAL v1.1

## Contents

1. INTRODUCTION .....	4
2. OPERATING CONFIGURATOR .....	5
2.1 CONNECTING .....	5
2.2 CONFIGURATING THE MODULE.....	5
2.3 CHECK-UP AND MANUAL CONFIGURATION.....	6
2.4 IMLET LOADING .....	9
2.5 ADDITIONAL SETTINGS AND PREFERENCES .....	9
3. CHANGES LOG SHEET.....	11

---

Module configuration, Imlet loading and main function are described in this document. These are basic functions that are required to start working with module.

---

Copyright © 2007 UAB „Teltonika“.

All rights reserved. Reproduction, transfer, distribution or storage of part or all of the contents in this document in any form without the prior written permission of Teltonika is prohibited.

---

## 1. Introduction

---

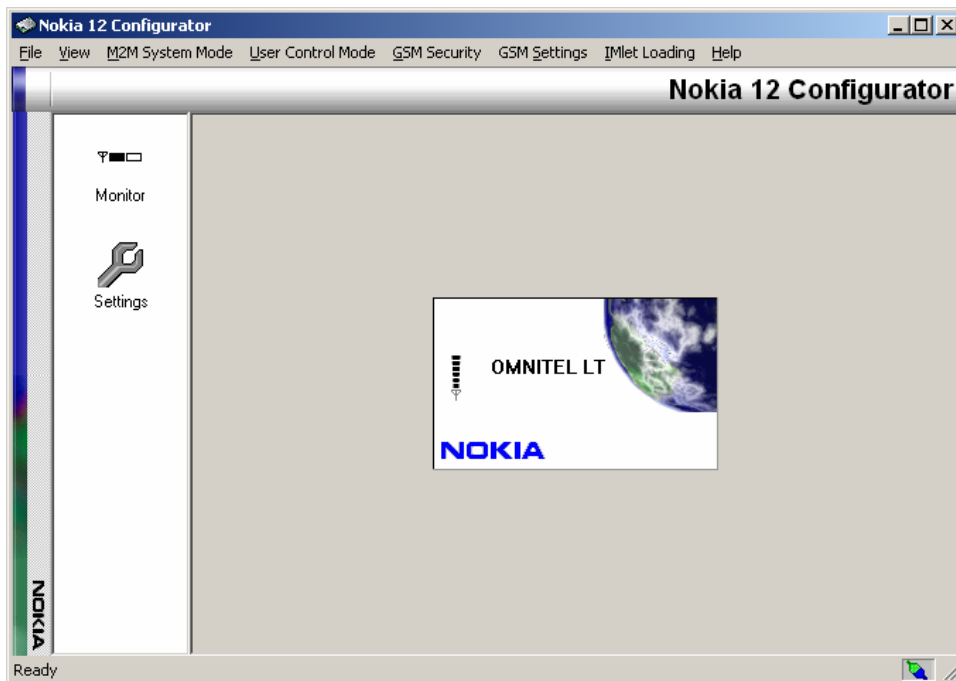
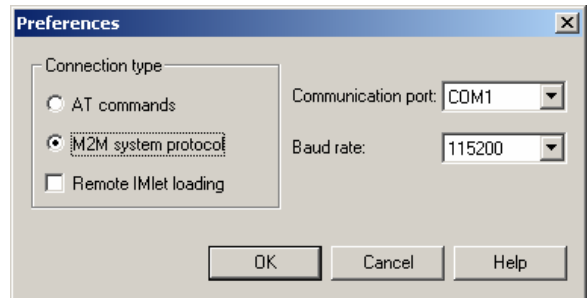
Nokia 12 configurator is used to start new modules and prepare them for work. For this few requirements are to be met: SIM cards must have activated SMS and GPRS services, VPN or global Internet access, static IP address and roaming function enabled. SIM card provider should also present you with the following SIM card data: phone number, SMS center number, CHAP user name and password (if required), access point and static IP address (not necessary but highly recommended).

For general use of configurator a computer with COM port and installed Nokia 12 Configurator application is needed as well as configuration files and Midlets. To connect the module to the computer, FM3101 cable marked PORT 1/2 is used.

## 2. Operating Configurator

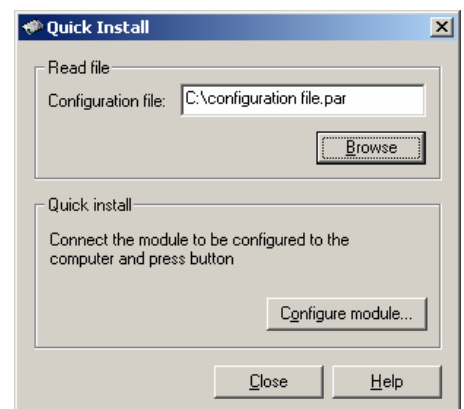
### 2.1 Connecting

For the first time, when launching Nokia 12 Configurator, you need to specify what port it will use to connect to module. Click "File" - "Preferences". In the new window mark "M2M system protocol", choose the Communication Port that you are using and set Baud Rate to 115200. Enter SIM card's, that is inserted in the module, PIN code and click "Ok". The picture below shows the main window with operators name or logo.



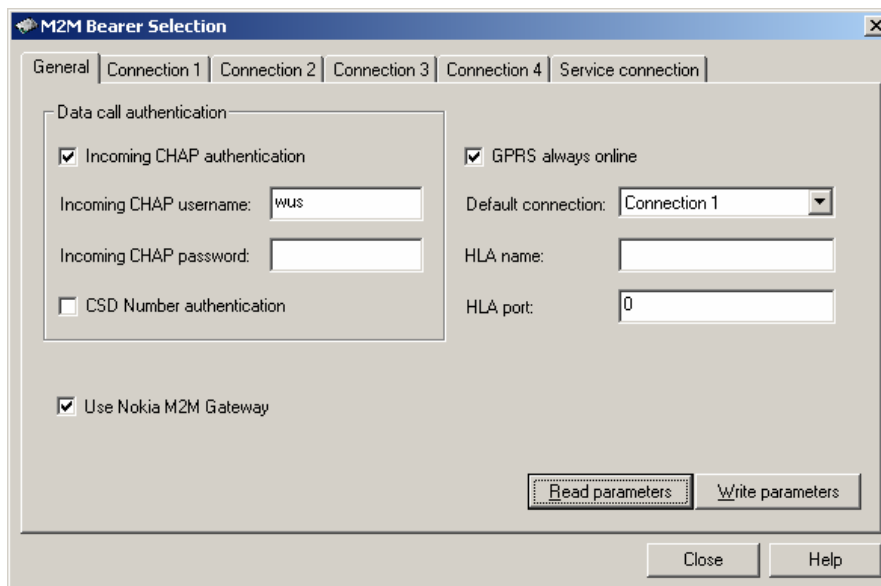
### 2.2 Configuring the Module

Click "File" - "Quick Install". In the new window select the path to the configuration file (with extension .PAR). For every operator a different configuration file is needed with different settings, although settings can be changed manually. To finish configuration click "Configure module" button.



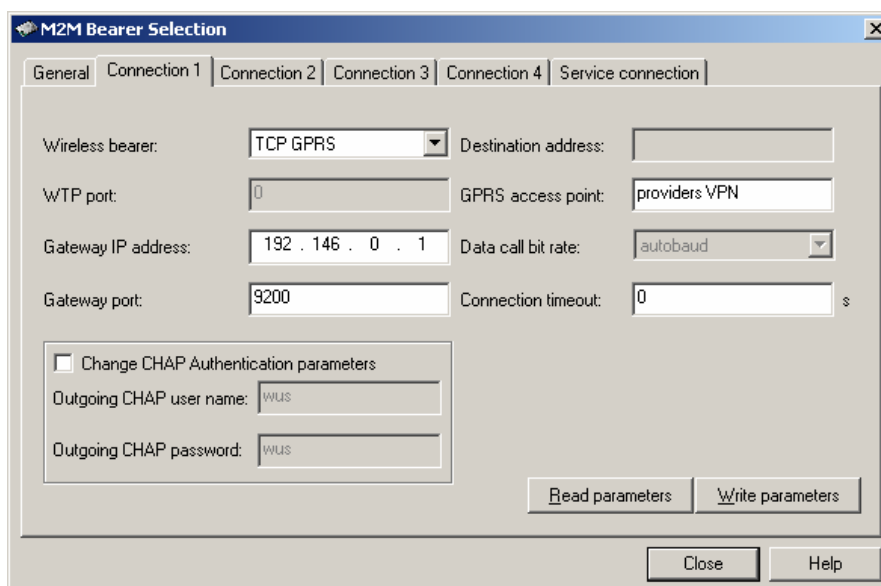
## 2.3 Check-Up and Manual Configuration

To configure module manually choose "M2M System Mode" and click "M2M Bearer Selection". In the "General" tab click "Read parameters". Usually parameters are only reviewed to check if they are correctly defined, so you don't have to do the following steps. However, sometimes manual configuration is needed. If your operator needs CHAP authentication, mark "Incoming CHAP authentication" field and enter username and password. Also mark "GPRS always online" and "Use Nokia M2M gateway". Default connection is usually chosen Connection 1. Click "Write parameters" button to apply the settings to the module.



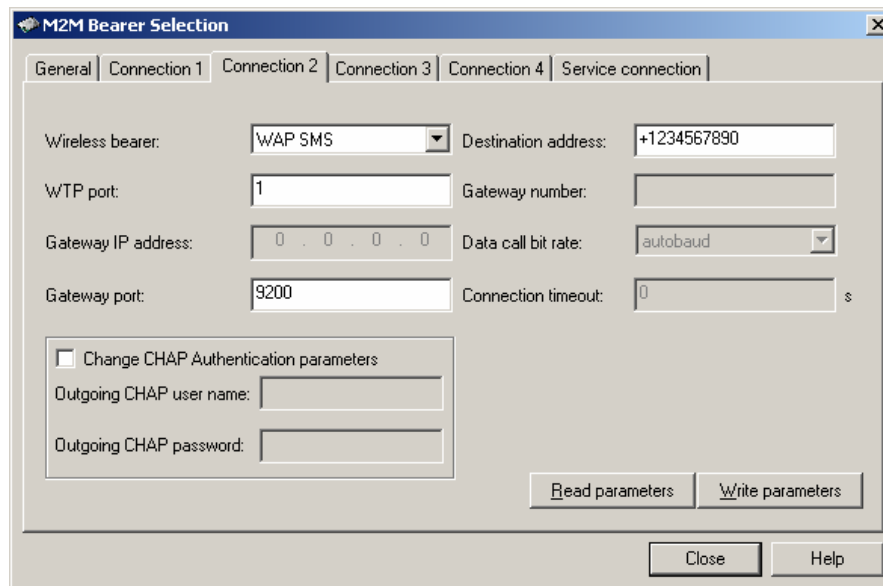
The screenshot shows the "M2M Bearer Selection" dialog box with the "General" tab selected. The "Data call authentication" section has "Incoming CHAP authentication" checked, with the username "wus" entered. "GPRS always online" is also checked. The "Default connection" dropdown is set to "Connection 1". The "Use Nokia M2M Gateway" checkbox is checked. The "Read parameters" and "Write parameters" buttons are highlighted.

Click on "Connection 1" and click "Read parameters" button. If by default the connection is Connection 1 (by GPRS), wireless bearer should be set to TCP GPRS. Gateway IP address and port is the address of the server that data will be sent to. GPRS access point defines providers VPN. If VPN is entered incorrectly, some operators may let you connect to public domains, others don't allow connection at all.

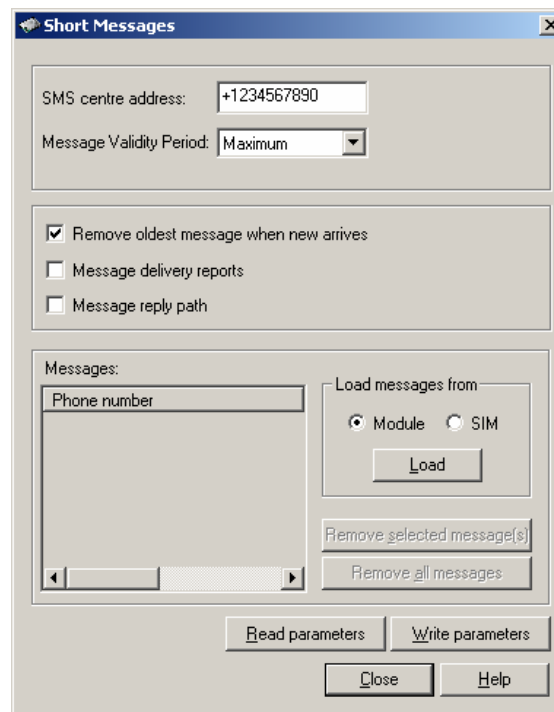


The screenshot shows the "M2M Bearer Selection" dialog box with the "Connection 1" tab selected. The "Wireless bearer" dropdown is set to "TCP GPRS". The "Gateway IP address" is "192.146.0.1" and the "Gateway port" is "9200". The "GPRS access point" is "providers VPN". The "Data call bit rate" is set to "autobaud". The "Change CHAP Authentication parameters" checkbox is unchecked. The "Read parameters" and "Write parameters" buttons are highlighted.

Click on "Connection 2" and click "Read parameters" button. Connection 2 is usually SMS connection, so "Wireless bearer" should be set to WAP SMS. Used gateway port should be defined as well as destination address, which is server's modem number in international format. If any changes are made to connections, click "Write parameters" button to apply settings to the module.



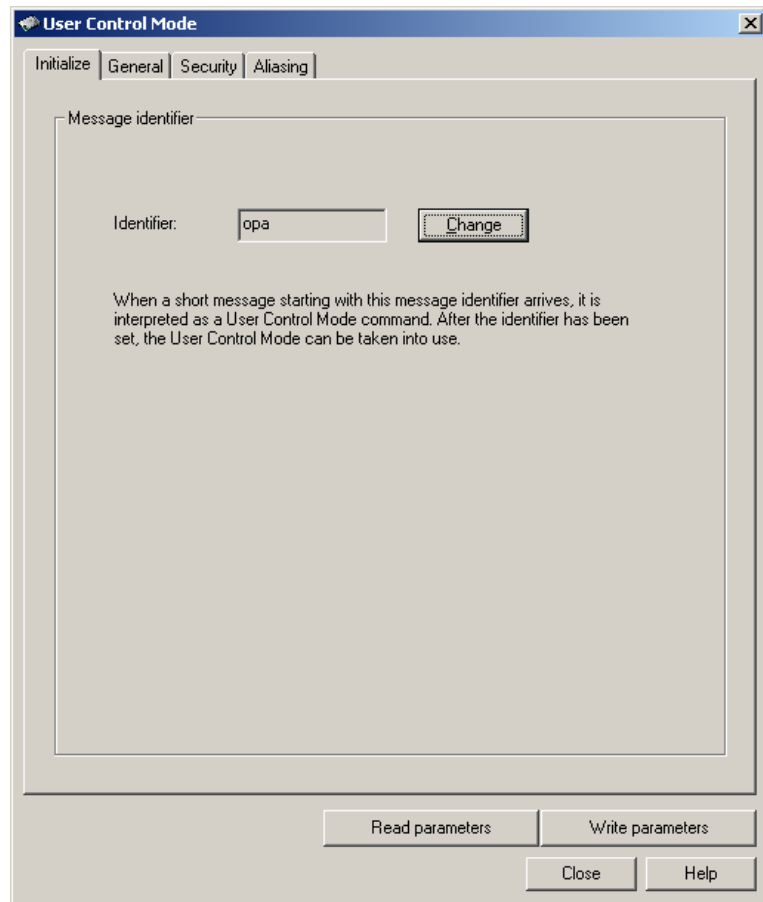
In the toolbar click "GSM Settings", "Advanced" and "Short Messages". Click "Read parameters" and check the operators SMS center number. "Message Validity Period" is usually set to maximum and "Remove oldest message when new arrives" box is checked.



If configuration was changed or done manually, settings can be saved, so you don't have to enter them manually again later. In the main configuration window click "File" and "Save All Settings" and create a new .par file.

To set message identifier click "User Control Mode" - "Settings". Click on "Read Parameters"

button and check the identifier. If you want to change it, click "Change", enter new identifier and click "Accept" button. To activate settings, click "Write Parameters" button.



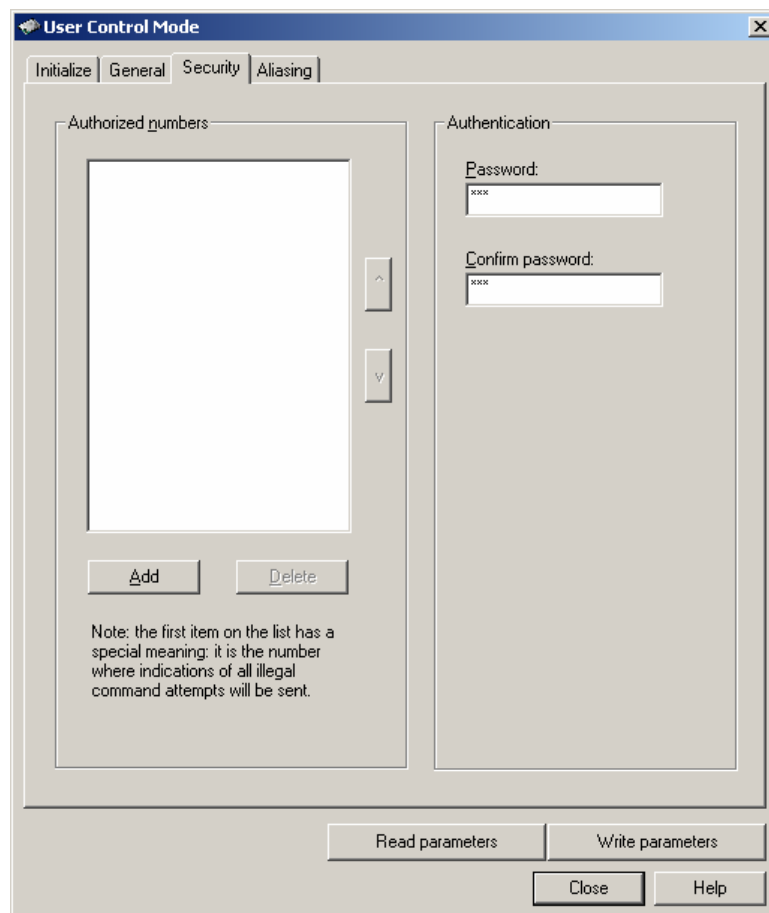
**User Control Mode**

Initialize | **General** | Security | Aliasing

Message identifier:

Identifier:

When a short message starting with this message identifier arrives, it is interpreted as a User Control Mode command. After the identifier has been set, the User Control Mode can be taken into use.



**User Control Mode**

Initialize | General | **Security** | Aliasing

Authorized numbers:

Note: the first item on the list has a special meaning: it is the number where indications of all illegal command attempts will be sent.

Authentication:

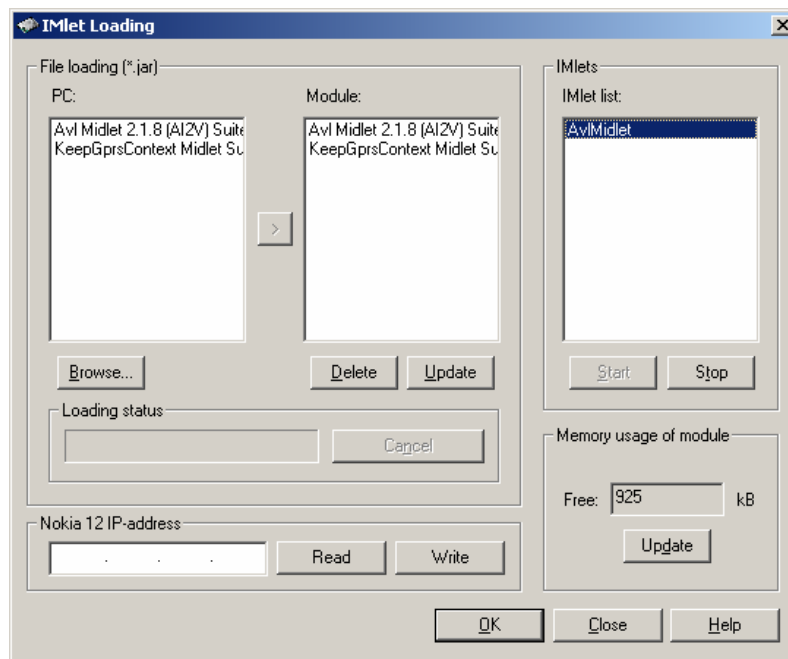
Password:

Confirm password:

Password is set in the "Security" tab. If you are not sure what password is entered, enter new password in both fields and click "Write Parameters" button. Also check Authorized Numbers list to see which numbers can send requests and configuration messages to the device. If list is empty, it means that any number can send these messages.

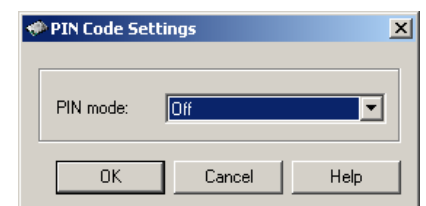
## 2.4 IMlet Loading

To load an IMlet to the module click "Imlet Loading" in the toolbar and select "Cable". Click "Browse" button under PC dialog box and set the path to the folder with Imlets (.jar files). By default in every module "Keep GPRS Context" and "Avl Midlet" should be installed. Select the midlet and click ">" button to load it to the module. When all midlets are loaded, select "Avl Midlet" in the Module dialog box. Imlet list appears in the Imlets dialog box. Click the "Start" button to launch the Imlet. Note that if you want to delete the Midlet, it has to be stopped first. Again select the Midlet in the Module dialog box and after clicking on Imlet, click "Stop".



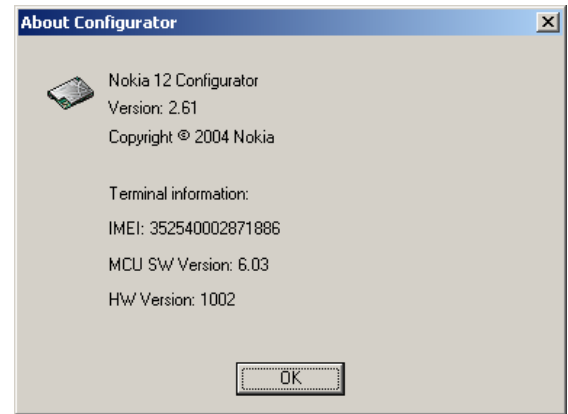
## 2.5 Additional Settings and Preferences

Modules Imei number, software and hardware version numbers can be viewed with configurator. These are needed for module registration in the database. To access it click "Help" and "About".



It is also important to set PIN code entering to auto or off on configurator, or turn off PIN code manually (usually it is done with mobile phone). Click "GSM Security" in the toolbar and choose

"PIN Code Settings". Select mode and click "Ok". If mode is set to "Off", PIN code request is turned off. For better SIM card protection you can turn mode to "Auto". This way the module will enter PIN code automatically every time it starts.



### 3. Changes Log Sheet

---

Nr.	Date	New version number	Comments
1	070220	1.1	Password and identifier description added.