



SMS Module Manual

Version 1.0  
REV04-20160415

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## GENERAL INFORMATION

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Please read the manual before beginning and keep the manual for later use.

The manual has been conceived and written for users who are experienced in the use of PCs and automation technology.

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## CONVENTIONS

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[KEYS]	Keys that are to be pressed by the user are given in square brackets, e.g. [CTRL] or [DEL]
COURIER	On-screen messages are given in the Courier font, e.g. C:\>
<b>COURIER BOLD</b>	Keyboard input to be made by the user are given in Courier bold, e.g. C:\> <b>DIR</b>
"..."	Names of buttons to be pressed, menus or other onscreen elements and product names are given within double quotes. (e.g. "Configuration").
PICTOGRAMS	In this manual the following symbolic are used to indicate particular text blocs.
	<b>Caution!</b> A dangerous situation may arise that may cause damage to material.
	<b>Hint</b> Hints and additional notes
	<b>New</b> New features

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# 1 General overview

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## 1.1 PREFACE

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DIVUS KNX SERVER devices are able to connect to a GSM modem natively and to use it to send and receive SMS messages. Thus you can:

- Send SMS notifications to one or more recipients based on a certain event (e.g. an alarm device) without using the default internet connection, as used by email notifications.
- Execute one or more commands on the KNX system when receiving a predefined SMS message from a certain mobile phone number.

## 1.2 REQUIREMENTS AND LIMITS

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To use the SMS functionality of your KNX Server, you need

- A KNX SERVER with additional SMS module *UP-SMS* (not included in KNX SERVER's default licenses)
- A 2G-capable SIM card in full size <sup>1</sup>
- A serial cable (RS-232) with DB9F and DB9M connectors to connect the GSM modem to the KNX SERVER

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<sup>1</sup> Whether a SIM card is 2G-capable depends on your mobile network provider. 2G stands for 2<sup>nd</sup> generation mobile networks and is the predecessor of 3G. A 3G or newer network is a separate network which does not automatically contain/support 2G.

# 2 Installation

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## 2.1 CONNECTION

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Power off the KNX SERVER if it is running. Then connect the KNX SERVER to the GSM modem using the serial cable.

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## 2.2 MODEM ACTIVATION

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Insert the SIM card into the card slot of the GSM modem. Then power the modem using the power adapter.



**Caution:** Make sure the SIM card is suitable to be used on 2G networks. If the mobile network provider uses/requires a 3G network, the card cannot be used to send and receive SMS messages.

# 3 Configuration

## 3.1 INTRODUCTION

To activate the SMS section in Optima, you need the SMS module license key. Follow this procedure:

- Login to Optima's Administration as user with administrator rights
- Open the page under *SETUP – Licenses and modules*
- Insert the SMS module license key into the field labelled *SMS*
- Click the *SAVE* button
- Check the same page again, after Optima reloaded, to make sure the key was accepted as valid
- You should now find a new menu point under *Technologies* called **SMS**

## 3.2 GSM MODEM

To set up the GSM modem, go to the new menu entry *SMS* under *Technologies* and click on *GSM modem*. Then click on the *Plus* icon (New) in the bottom left toolbar to add a new modem. Finally click on the ellipsis next to the "New GSM modem 1" or on the *EDIT* icon in the toolbar to open the modem's detail page.

The screenshot displays the DIVUS OPTIMA administration interface. The top navigation bar includes the logo, a search bar, and buttons for 'SAVE', 'CLEAR CACHE', 'EXPERT', 'LOGOUT', and 'VISUALISATION'. The main content area is titled 'New GSM modem 1' and contains the following sections:

- Object properties:**
  - General information:**
    - Name: New GSM modem 1
    - Activate:
    - Communication: Serial GSM modem
    - PIN code of the SIM: [empty field]
    - Enable Hardware control:
    - Baudrate: 19200
  - Serial GSM modem:**
    - Port: USB port 1
- Buttons:** CHECK, CLOSE, UPDATE CONF.
- Contacts table:**

Name	Description / ETS name	Number
ADD		
- SMS list table:**

Name	Description / ETS name	SMS
ADD		

The following settings are available:

NAME	Used inside Optima to recognize the modem
ACTIVATE	May be used to activate or deactivate the modem
COMMUNICATION	No settings available here ( <i>Serial GSM modem</i> is the only possible choice) – may be changed in future releases.
PIN CODE OF THE SIM	If necessary, you may insert the SIM card's PIN code here. Actually we recommend to remove the PIN code protection to ease the SIM's usage.
ENABLE HARDWARE CONTROL	May be set here if the modem requires this feature. The bundled modem does <b>not</b> require this setting, so please don't change it.
BAUDRATE	Default value of <i>19200</i> should be used for the bundled modem. Otherwise, change according to your modem's requirements.
PORT	The bundled modem's port is the Serial port (RS232). Only custom solutions could require a change of this setting.  The <i>CHECK</i> button tests and signals through its colour (green for success, red for failure) whether the communication with the modem on the chosen port could be established successfully or not.

When the setup is complete, click the UPDATE CONF. button to store the settings and start the communication with the modem.



**Hint:** The SMS module works with one single GSM modem. Do not create multiple modems to avoid issues!

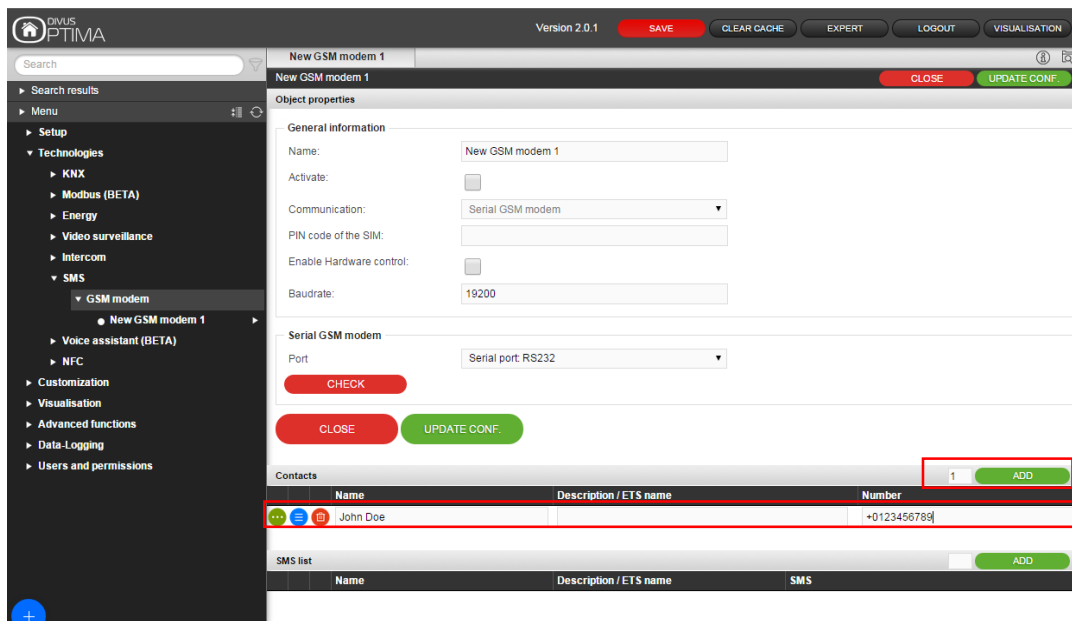
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### 3.3 CONTACTS

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Once the GSM modem was configured successfully, at least one contact has to be added to the system. This contact may then be used as recipient of SMS notifications or as authorized source of commands sent as SMS messages (and then executed by the KNX SERVER).

To add contacts, you may insert the number of contacts in the small input field next to the green *ADD* button and then click the button.



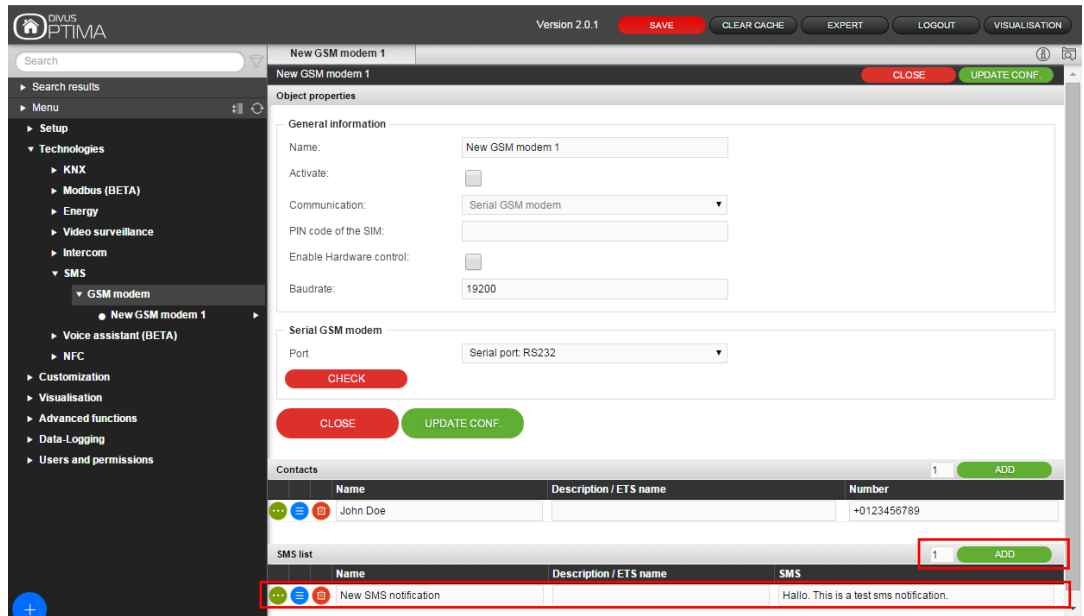
Each new contact needs:

NAME	To recognize the contact inside Optima
NUMBER	Complete phone number with international prefix and the „plus“ symbol. No special characters or empty spaces allowed!

### 3.4 SMS NOTIFICATIONS

To create new SMS notifications, follow the same procedure as for contacts (see 3.3 above): insert the number of notifications to be added and push the *ADD* button on top of the *SMS list*.





Each notification can be edited:

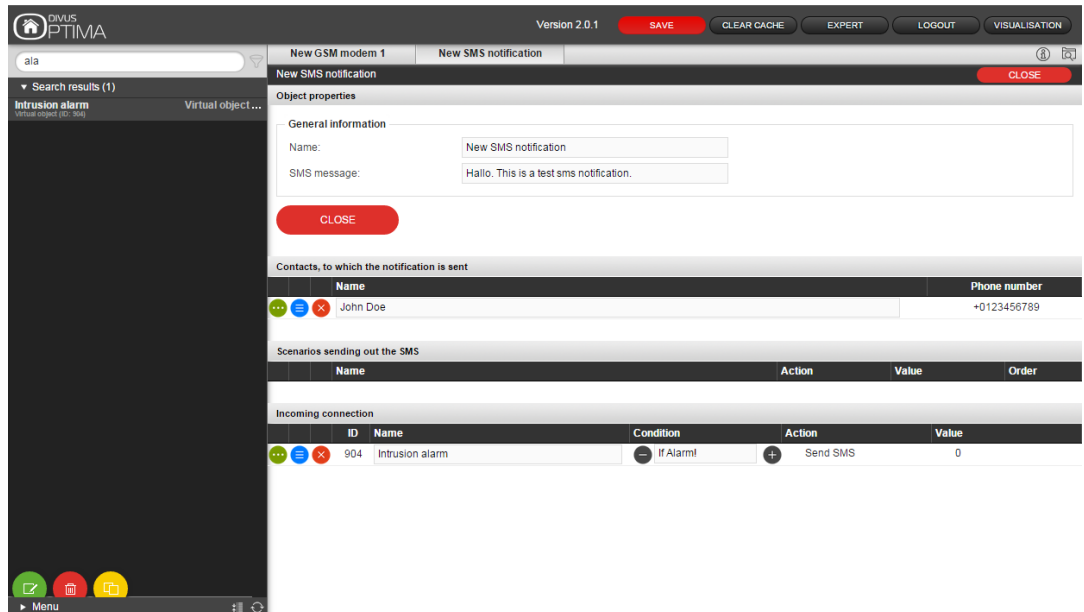
NAME

Name of the SMS

SMS

Content of the notification to be sent

Once created, open the notification by clicking on the green EDIT icon at the beginning of its row.



Here you can add contacts as recipients (*Contacts, to which the notification is sent*) and one or more objects which should trigger the notification when they have a certain value (*Condition* column) under *Incoming connection*.

### 3.5 SMS COMMANDS

To set up a command to be executed when an SMS message is received from a contact, follow this procedure:

- Open the detail page of the contact who should send the command
- Drag the object to be set onto the *Outgoing connection* list
- Configure the details: for which condition should happen what. In the *Condition* field, insert the text content which the SMS must have to trigger the execution (the word *ALARM* in the example below)

The screenshot displays the DIVUS OPTIMA web interface. The top navigation bar includes the logo, version (2.0.1), and buttons for SAVE, CLEAR CACHE, EXPERT, LOGOUT, and VISUALISATION. The main content area is divided into two sections: 'Object properties' and 'Outgoing connection'.

**Object properties:**

- General information:**
  - Name: John Doe
  - Phone number: +0123456789

**Outgoing connection:**

ID	Name	Condition	Action	Value
905	Window contact	ALARM	Write	Closed



