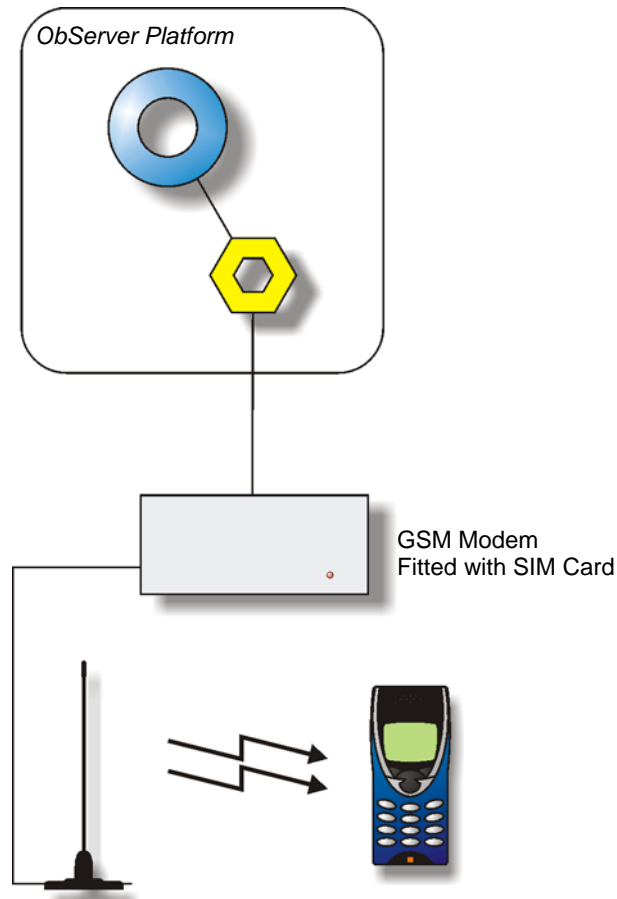


Product Engineering Guide

OSM v20 GSMSMS v11

Introduction

The GSMSMS OSM provides a gateway between ObServer and the Short Message Service (SMS) facilities of mobile telephones. The OSM can send Alarms directly to a users mobile telephone via a GSM Modem fitted with a SIM card. If used with a UserData module (either within ObServer or elsewhere), the SMS user can request user pages, and set values within the pages.



Operation - alone

Alarms from elsewhere are sent to the GSMSMS module, which sends the alarms to the current alarm user, or alarms can be sent to individual users directly. The GSMSMS module interacts with the modem, and sends the alarm using SMS.

Operation – with UserData

SMS users can send a text message, containing a page label, to the GSMSMS module. The module requests the page data from the UserData.

The GSMSMS uses the user's telephone number to determine access rights for the user.

Note

The GSMSMS OSM requires a modem which uses GSM 07.05 protocol.

Engineering

Step 1 – Install OSM

The GSMSMS OSM is installed automatically with all ObSys editions. Refer to the 'ObSys CD sleeve' for details on how to install ObSys.

Step 2 – Set up GSM Modem

The GSMSMS OSM communicates with mobile telephones using a GSM modem. GSM Modems are normally supplied without SIM Cards: prepare the GSM Modem for connection to the PC.

Step 3 – Connect COM Port to GSM Modem

Using cable, connect the GSM Modem to a COM port of the PC. Refer to the section 'Cable' below for details of the cable.

Step 4 – Plug in GSMSMS OSM to ObServer

Use object-engineering software to locate the ObServer Set-up object. Assign the GSMSMS OSM to an available channel. Refer to 'ObServer v20 Application Engineering Guide'.

Note: After inserting the OSM, your engineering software may need to re-scan the ObServer object in order to view the OSM.

Step 5 – Configure GSMSMS OSM

The COM port, list of users, alarm facilities, and current alarm user are configured using objects. Use object-engineering software to view and modify the module objects within the OSM.

Step 6 – Test Alarms sent to the GSMSMS device

Alarms can be sent to the GSMSMS device and will then be passed on to a mobile phone. Test Alarms can be entered into the New Alarm field to test alarms delivery. A short text message can also be sent to a user by entering text into the New Alarm object

Step 7 – Configure UserData object (Optional)

Use object-engineering software to set up the UserData object reference and configure pages and values within the UserData object that will be used by the GsmSms OSM.

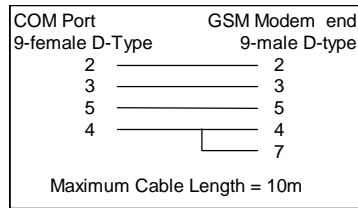
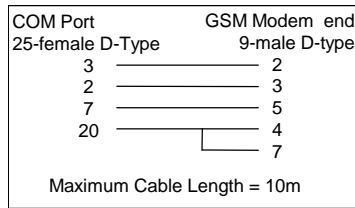
Step 8 – Test the SMS Server (Optional)

Values from within the UserData system can be requested from a mobile phone. Send a SMS message to the GSM Modem – the server should respond within a few seconds with the information requested. See 'SMS Requests' below for information about different SMS requests

Engineering Reference

Cable Specification

The cable between COM port and the GSM Modem is as follows:



SMS Requests

The UserData object holds pages of values. Each page has a reference (normally a few characters). Each value within a page also has a reference.

Request Message	Reply Message
<none>	Introduction page
LIST	List of Page-references
<page-ref>	List of Value-references and values
<page-ref> <value-ref> <value>	List of Value-references and values after modification

Example

If the UserData has the following pages/values defined:

Page Title	Reference
Room 1	P1
Room 2	P2

Value Title	Reference
Air Temperature	O1
Heating	O2
Lighting State	O3

Value Title	Reference
Air Temperature	O1
Heating	O2
Lighting State	O3

A text message of **<BLANK>** will get a return message of **Welcome to DEMO SMS SERVER. Send LIST for list of pages.**

The text DEMO SMS SERVER comes from the sever label held within the Compass point

A text message of **LIST** will get a return message of **List of pages: P1, P2. Send <PAGE> for info.**

A text message of **P1** will get a return message of **P1 items: O1 is 23.5, O2 is off, O3 is on. Send <PAGE> <OBJ> <VAL> to change**

If the user wants to change the lighting then send the message **P1 O3 OFF** and this will change O3 from on to off, A return message will be sent.

P1 items: O1 is 23.5, O2 is off, O3 is off. Send <PAGE> <OBJ> <VAL> to change

Note that the value O3 is now off.

Objects

When the OSM is loaded the following objects are created within ObServer, use object software to access these objects.

Object^[1]	Label	R/W	Type
Sc	GsmSms System connected to channel <i>c</i>	-	[GsmSms v11]
Mc	GsmSms Module connected to channel <i>c</i>	-	[OSM v20\GsmSms v11]

Notes

[1] The ObServer channel number, *c*, is a number in the range 1...40.