

# SIEMENS



**Intrunet**

**Product: GMSW7 SensTool**

**en** **Operating instructions**

Installation manual A6V10245824\_b\_en\_--  
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**Building Technologies**  
Fire Safety & Security Products

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# 1 General

The  symbol identifies useful information.



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These instructions detail how to use the software for SensTool. It is assumed that the user knows how to use the detector.

If however you still have any questions, please contact the support team.

<http://www.buildingtechnologies.siemens.com/support>

The screenshots shown are examples and may deviate from what is displayed by your software.

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## 1.1 Description

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SensTool is a piece of software offering the following functions:

- use for seismic detector, type GM7xx (without GM710).
- setting the operating parameters.
- detecting the permitted detector settings.
- analysis of detector data.
- reading out event data from seismic detectors.
- data transfer with RS232 port.
- saving and opening signals and detector data.

## 1.2 Scope of supply

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The scope of supply includes:

1x RS232 connection cable for connecting seismic detector to computer port.

1x CD GMSW7 SensTool with the latest version of SensTool and the operating instructions in PDF format.

## 1.3 System requirements

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In order to use the SensTool software, your computer must feature the following:

- X86 processor with at least 166MHz and 40MB RAM.
- CD drive.
- RS232 or USB port with converter to RS232 (the converter is not included in the scope of supply).
- at least 100MB of free memory space on the hard disk.
- Operating system: Windows 2000 / NT 4.0 / XP / VISTA.

## 2 Installation

### 2.1 Installing software

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The software must not be disseminated to third parties or sold.

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If SensTool is already installed on the computer, open the program and click on "?" to find out which version you have installed.

If you have an older version ( < V1.1.4 ), it is possible that not all current detector types will be detected. So install a new version.

Install the software as follows:

- Close all applications on the computer.
- Insert installation CD. ⇒ The installation program launches automatically



If it doesn't launch automatically, you can start the "**gmsw7-x.x.x\_installer.exe**" program manually from Explorer.

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- Follow the installation program instructions.

### 2.2 Installing hardware

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Link the seismic detector to the computer by cable as follows:

- Open the seismic detector.
- Use the computer's free RS232 connection (=COM port) to connect the seismic detector via a connection cable. If the chosen COM port is already being used by another application, this should be closed.
- If connecting via the computer's USB port, use a USB to RS232 converter.
- Start supply voltage on the seismic detector.

## 3 Program application

### 3.1 Starting SensTool

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Proceed as follows to start the SensTool software:

- Start using

**Start** ⇒ **Programs** ⇒ **Siemens**

-or-

double-click on the  
program symbol



- Select the language you want.
- Select the connection you want: "**COM1**" / "**COM2**" / "**COM....**" or "**No detector connected**".



The "**No detector connected**" setting is used to configure settings if there is no detector connected or to evaluate saved data.



- Use the "**OK**" command to confirm the entries and pass to the main menu or use the "**EXIT**" command to close the program.

### 3.2 Main menu

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You can adjust the window displayed to the size you want by dragging the frame.

Select one of the three menus from the main menu.

- Settings
- Analyse
- Event memory



## 3.3 Menu: Settings

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### 3.3.1 Command bar



You can run the following commands:

<b>Open...*</b>	⇒	Opens saved data, detector settings and description text.
<b>Save As ...*</b>	⇒	Saves the current data, detector setting and description text in the directory selected.
<b>Default</b>	⇒	Sets the display in SensTool to the basic factory setting.
<b>Detector Upload **</b>	⇒	Imports data from connected detector to SensTool.
<b>Detector Download **</b>	⇒	Transmits the latest set data from SensTool to the connected detector.

**\* Example of application**

To program several detectors for one application, the configuration can be saved and reloaded. A configuration can then be prepared for one application ("**Save as ...** ") and loaded to several detectors later on ("**Open ...** " and "**Detector Download** ").

**\*\*** during the data transfer, the cable connection to the detector and its voltage supply must not be interrupted.

3.3.2 Basic Settings

Basic Settings

Detector Type:

GM760

TEST Input Polarity:

Active low

REMOTE Input Polarity:

Active low

Temperature Surveillance:

Off

Upper Limit:

85 °C

Lower Limit:

-15 °C

Alarm Relay:

NC (normally closed)

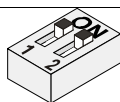


Note possible specifications of local approval bodies.  
The basic setting applies to all positions of the detector's DIP switch.

Select the following settings for the connected detector:

Detector Type:	⇒ Selection of detector types available.
TEST' Input Polarity:	⇒ Select "Low-active" or "High-active" depending on the port connected.
REMOTE' Input Polarity:	⇒ Select "Low-active" or "High-active" depending on the port connected.
Temperature Surveillance:	⇒ Select "OFF" if you do not want the temperature to be monitored. Select "ON" if you do want the temperature to be monitored.
Enter Temperature <div><div>Enter Temperature</div><div>Upper Limit: 20 °C - 85 °C</div><div>85 °C</div><div>Cancel OK</div></div>	⇒ With temperature monitoring, you can enter the temperature specification for the maximum and minimum limit in degrees Celsius.  With GM730 the limits cannot be changed.
Alarm Relay:	⇒ Select "NC" (normally closed) or "NO" (normally open) depending on application.

### 3.3.3 USER MODE Settings



USER MODE

To activate the USER MODE settings, the DIP switches in the detector must be set to **"USER MODE"**.

The recommended settings can be found in chapter 4.

Enter the following values in the **"USER MODE settings"** box:

<b>Application</b>	⇒	Select the existing base material (LWS for light-weight safe) with the detection radius <b>r</b> (also refer to operating instructions for detector).
<b>Shock Sensitivity</b>	⇒	Select how sensitively the detector is to respond to single impacts on the detector or its base.
<b>Digital Filter</b>	⇒	Select whether a filter is to be activated for interference frequencies or for mechanical time switches. When the filter is activated, these faults don't activate alarms.

### 3.3.4 Description

Note information about the setting or application which is important to you in the boxes. These are saved using the **"Save as ..."** command (see chapter 3.3.1) and are saved along with data relating to the detector setting. The description is not saved in the detector.

### 3.3.5 Footer

COM1 Ready Actual Settings: Application: Concrete 4.0 m, Shock Sensitivity: High, Digital Filter: Off

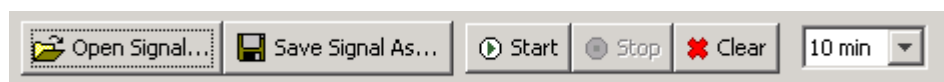
The footer shows you the following up-to-date information:

Left side	⇒	Connection between detector and computer.
Right side	⇒	Setting data for detector.



## 3.4 Menu: Analyse

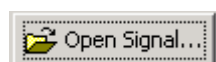
---



The **"Analyse"** menu can be used to

- display signals
- save signals
- open saved signals
- start recording
- delete recording

### 3.4.1 Open Signal ...



You can open saved signals and depict them graphically. (file format .txt)

### 3.4.2 Save Signal As ...



You can save the signals currently displayed in the directory selected. (file format .txt)

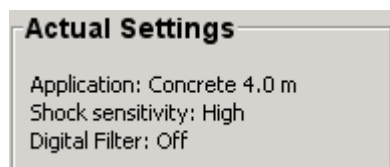
### 3.4.3 Recording signals



Select the following settings:

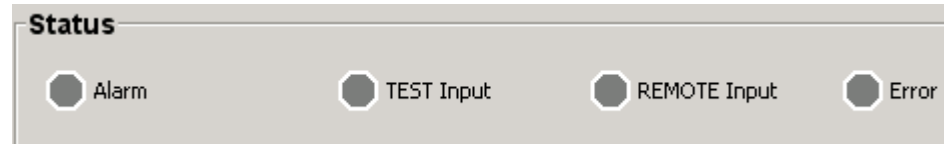
<b>Start</b>	⇒	The recording begins.
<b>Stop</b>	⇒	The recording is stopped.
<b>Clear</b>	⇒	The recording is deleted.
<b>...min</b>	⇒	The possible recording periods are 10 minutes, 100 minutes or 18 hours.

### 3.4.4 Actual Settings



The info box shows the actual detector settings.

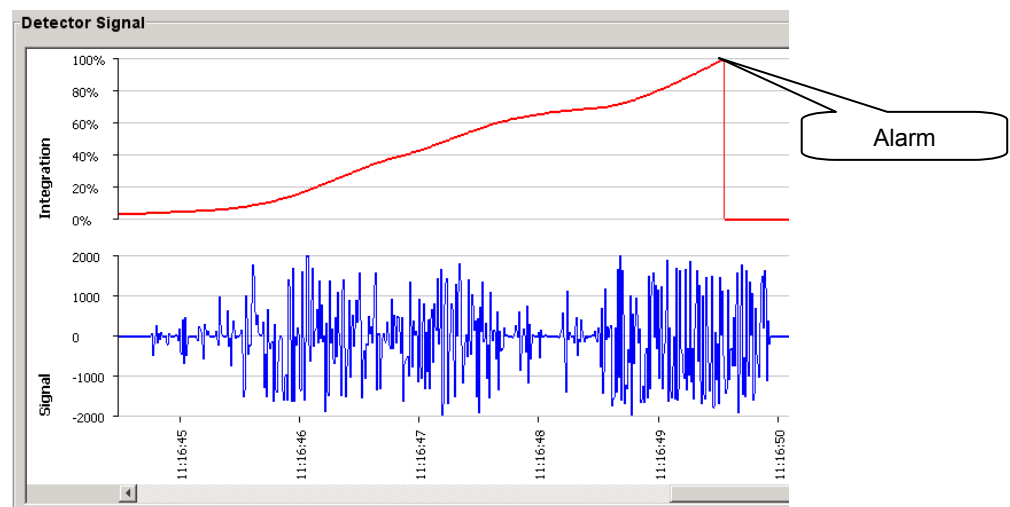
### 3.4.5 Status



The status is displayed during the recording.

<b>No Alarm</b>	Green ⇒ Recording underway.
<b>Alarm</b>	Red ⇒ Alarm activation due to vibration.
<b>(Integration)</b>	
<b>Alarm</b>	Red ⇒ Alarm activation due to impact.
<b>(Shock)</b>	
<b>Alarm</b>	Red ⇒ Alarm activation due to the set temperature limits being exceeded.
<b>(Temperature)</b>	
<b>Alarm</b>	Red ⇒ Alarm activation due to damaged drill protection.
<b>(Drill)</b>	
<b>"Test" Input</b>	⇒ Current status active/not active.
<b>"REMOTE" Input</b>	⇒ Current status active/not active.
<b>Error</b>	Red ⇒ The detector is receiving invalid data. So re-transmit data to detector (see chapter 3.3.1).

### 3.4.6 Detector Signal



The detector signal recording is shown in blue in the bottom diagram. The time details start when the recording starts. The signal strength is shown in the scale using values up to 2000.

If the detector signals fulfil the requirements of an alarm, these signals are integrated and shown in red in the top diagram. If integration reaches 100%, an alarm is activated.

### 3.5 Menu: Event Memory for GM760/GM770/GM775

The following are considered detector events:

- Restart of detector after an interruption to the supply voltage.
- Alarm activation.

These events are saved in the detector. They can be read out with SensTool, saved as a report and deleted in the detector.



The time displayed may vary by  $\pm 10$  minutes a day

The detector is equipped with a time measuring function which starts to run when the supply voltage is applied. The time is saved for every event. If the supply voltage is switched off (interrupted), the time measurement starts again from scratch once the supply voltage is switched on.

SensTool can read the events from the detector with the time measurement and calculate the time and date for the current period. The calculation is based on the computer's time/date.

Earlier events are shown with the time relative to the corresponding restart (reset).

Save As Report...

Event Memory Upload

Clear Event Memory in Detector

Restart

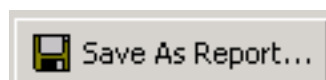
Time after restart

Restart

Date and time calculated

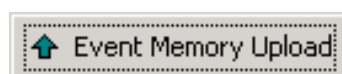
Date	Time	Event
Reset	00:00	Reset
Reset + 0 days	22:33	Integration Alarm
Reset + 2 days	03:03	Temperature Alarm
Reset + 4 days	04:34	TEST active   Integration Alarm
Reset	00:00	Reset
Reset + 3 days	05:56	Drill Alarm
Reset + 6 days	01:36	Integration Alarm
2008-10-28	03:14	Reset
2008-10-30	08:12	Integration Alarm
2008-10-31	20:24	Drill Alarm
2008-11-02	11:56	TEST active   Integration Alarm

#### 3.5.1 Save As Report ...



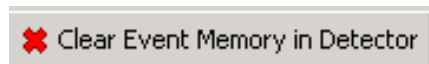
The report currently shown is saved in the directory selected.

#### 3.5.2 Event Memory Upload



Data is copied from the detector to SensTool and can be saved as a report.

### 3.5.3 Clear Event Memory in Detector



Event data in the detector is deleted. Detector settings are retained.

### 3.5.4 Display

#### Date

This column shows the calendar date calculated with year, month and day (e.g. **2009-01-22**) or the days after a restart (e.g. **Reset +0 days**)

#### Time

This column shows the time in hours and minutes.

#### Event

This column shows the type of events. Several events may occur at the same time.

Event	Meaning
Reset:	Restart of detector after an interruption to the supply voltage.
Integration alarm:	The alarm has been activated due to vibrations.
Temperature alarm:	The alarm has been activated due to the set temperature limits being exceeded (see chapter 3.3.2).
Drill alarm:	The alarm has been activated due to the drill protection film being drilled or cut through.
Shock alarm:	The alarm has been activated due to impact.
TEST active:	"TEST" input has been activated.*
REMOTE active:	"REMOTE" input has been activated.*

\* is only saved if an alarm is activated at the same time.

## 4 Recommended settings

The following settings are recommended for standard applications.

### 4.1 Basic Settings

**Alarm relay** set to **"NC"** (normally closed).

**Temperature Surveillance** set to **"Off"**. If you want the temperature to be monitored, set this to around 10 degrees Celsius above or below the detector's expected operating temperature.

## 4.2 USER MODE Settings

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Digital Filter set to Off

Application	Impact sensitivity	Application
Steel 1.0 m	Low	Ticket machine with loud function-related noises.
Steel 1.5 m	Medium	ATM, day/night vaults, safes with loud function-related noises.
Steel 2.0 m	Medium	Encased safe, vault doors with function-related noises.
Concrete 2.5 m	High	Vault room, element vault with some interfering influences.
Concrete 4.0 m	High	Vault room, element vault with low interfering influences.
Concrete 5.0 m	High	Vault room, element vault with minimal interfering influences.
LWS 1.5 m	High	ATM made of plastic plating system with function-related noises.
LWS 2.0 m	High	Element vault made from plastic plating system with minimal noises.

## 5 Troubleshooting

If errors arise when displaying the detectors, proceed as follows:

- Ensure that the right type of detector and COM port is selected in the software.
- Ensure that no other application is accessing the COM port which SensTool is using.
- Inspect all cable connections and check the plug contacts for dirt.
- Ensure that the detector is energised.
- Check the software installation and re-install the software.

If the error persists or other errors arise, contact the support team.

<http://www.buildingtechnologies.siemens.com/support>

## 6 Details for ordering

Item	Order number
SensTool software	A5Q00006246



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