

# Reference Manual

## EssSMS Component

Version 2.00

By

**Evergreen Systems & Services**

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### 1. About EssSMS

EssSms is an optimized non-visual component for Delphi. It enables instant creation of application implementing SMS communication. PCs connected with GSM modem (mobile phone w/ GSM modem or dedicated GSM modem) through serial or USB ports can directly send and receive SMS messages. Starting version 2.0, the component runs much faster.

### 2. Application

Send & receive SMS alerts, news, and reminders, SMS auto-response, bulk SMS transmission, unattended requests processing, SMS logging & recording, polling, for remote control of PCs & other electronic equipment.

### 3. Requirements

1. CPortLib at least v.3 serial port component. [Download here:](http://sourceforge.net/projects/compport/)  
<http://sourceforge.net/projects/compport/>.
2. USB or serial cable from the PC to modem. USB connection requires driver to create COM port.
3. GSM Modem. See the GSM Modem List for compatible brands and models.
4. Borland Delphi versions 5, 6, 7, 2005.

### 4. Object Events, Methods, and Properties

#### Events:

OnLog	const LogType: TLogType const sMsg: string	Component generated messages. Messages are group into types indicated by LogType.
OnConnect		Called when EssSMS successfully connects.
OnOperateStateChange	const osState: TOperateState	Called whenever EssSMS state changes.
OnSendSmsSuccess	const SmsRec: TSmsSend	Called whenever SMS is successfully sent. The message that was sent is returned for reference.
OnSendSmsFail	const SmsRec: TSmsSend	Called whenever SMS sending fails. The message that failed is returned for reference. Value of TEssSMS.LastCommandError is updated to reflect the cause of the problem.
OnRecvSms	const SmsRec: TSmsRecv var SaveInModem: boolean	Called whenever new SMS is received by the component. The SaveInModem argument provides option to retain a copy of the message into the modem or not. Default value is False. If this is set to True, user should manually monitor storage capacity of modem and manually delete the stored messages before it gets full. Otherwise the modem will not be able to receive new incoming messages anymore.  A new separate thread is created for every call to this event. Therefore, make sure your

		codes here are THREAD SAFE. Versions 1.39 and below are not threaded.
AfterOnGetUnreadSms	Const SmsCount: integer	<p>Called after processing the new/unread messages by OnRecvSms event.</p> <p>This event may not be called for every message received because when multiple SMS is received at ones, this is called only ones, after OnRecvSMS has processed them all.</p> <p>And similarly, this is called only ones after ALL messages is processed by OnRecvSms when EssSMS.GetUnreadSms is invoked. This is not called when no message is received even when you issue GetUnreadSms the command.</p> <p>The number of messages received is returned by SmsCount. Although, you could also count the messages received by counting the times OnRecvSMS is called.</p>

#### Methods:

ConnOpen	Activate connection to the GSM modem.
ConnClose	Deactivate connection.
GetUnreadSms	Read pending unread SMS from the GSM modem. Users should execute this after modem connection is established to load any offline messages.
SendSmsNow	Send the SMS defined in SmsSend property. Sometimes, incoming messages would not be able to reach the component specially when the modem is busy sending a series of messages and forgot to notify the component of the new transaction. In this case, call GetUnreadSms after a long series of sending is performed to get any new messages pending in the modem.

#### Published Properties:

CommDataPacket	Name of ComDataPacket of CportLib
CommPort	Name of ComPort of CportLib
EnableLog	Enable or disable the OnLog event. Default value is true.
IniFile	Name of INI file containing the initialization AT commands of GSM Modems. Default value is EssModelsSR.ini. There are 2 INI files included in the package EssModelsSR.ini and EssModelsS.ini. The former is for modems capable of sending and receiving SMS. The latter is for sending only. You need to explicitly execute the method GetUnreadSMS in order to read incoming messages for these modems. By default, these files are saved in C:\Windows\ directory. But users can rename these files and saved them in a different directory simply by updating the value of IniFile property.
Init	Additional initialization AT command. Executed after the IniFile.
MaxBufferSize	<p>Maximum buffer size in bytes for reading incoming SMS. Default value is 8192 bytes which is capable of processing 25 incoming SMSs at one time.</p> <p>When GSM modem is active, incoming messages are processed as received, therefore lower value for this property may suffice. But when EssSMS is not active, incoming messages may accumulate in the modem. If your buffer is not big enough to read the messages when the modem is activated, you will get exception when GetUnreadSMS is called.</p>

Name	Component name.
Port	COM port of the GSM modem.
SmsSend.SmsMsg	Text message to be sent. Maximum message length is 160 characters.
SmsSend.PhoneDestn	Destination phone number.
SmsSend.PhoneNumType	Phone number type. See 'Enumerated Types' list below.
SmsSend.SmsC	SMS Service Center. Default value is the SMSC of your SIM card. This is automatically filled by the GSM modem when no value is supplied.
SmsSend.RecordTag	Record ID of the message. This may be use as reference to identify the message when OnSendSMSFail and OnSendSMSSuccess events are called.
Tag	Component tag number.

#### Public Properties:

IsConnected	Indicator whether EssSMS is connected to the modem or not.
LastCommandError	Latest text error message.
Models	List of GSM modem from INI file specified by IniFile property as TStringList.
ModelSele	Model of the GSM modem to use selected from Models property.
OperateState	Operation state of the component. See the TOperateState below for the valid values.
SignalLevel	Signal quality level in percentage. Value is 1-100. Queries the modem every time this property is read.

#### Enumerated Types:

TPhoneNumType	ntInternational	Phone number is in international format.
	ntUnknown	Phone number is in any format.
TLogType	ItError	Error message.
	ItState	Change of state message.
	ItWarn	Warning message.
TOperateState	osReady	Connected and ready to accept command.
	osSmsSend	Sending message in progress.
	osSmsRead	Reading message in progress.
	osInit	Modem in initialization state during connection.
	osDisable	Connection is disabled.
	osSignalQuery	Signal quality query in progress.

### 5. GSM Modem List

Mobile phones that conform to the GSM standards ETSI GSM 07.07 and ETSI GSM 07.05 are suitable. Or these are mobile phones with GSM modem or dedicated GSM modem and accept PDU SMS format. But there are mobile phone/GSM modem that specify to be compatible to ETSI GSM specification but in reality are not 100% compatible. The following are reported to be compatible in varying degrees with the current standard release:

Brand	Model (send/receive)
Nokia	Card Phone RPE-1, 7110, 6210, 5110, 5130, 6090, Premicell, 5210, Card PHone RPM-1, 6310-I
Falcom	A1, A2, A2-D
Siemens	M20, TC35, TC37, MC32i
Wavecom	WMD2, WMOD-2, Fastrack 1306b
Telital	GM862
Samsung	Q200
Philips	Fisio 820
Sony-Ericsson	GC 75, D750, F500, J300, K300, K310, K50x, K510, K60x, K610, K700, K750, m600, p990, S7xx, T6xx, V600, V800, W300, W550, W600, W700, W710, W800, W810, W900, w950, Z500, Z520, Z530, Z550, z6xx, Z710, Z800, Z1010
Ericsson	T18s, GM12, T10s, T20s, R520, T28, T39, R380, R320, A2628s
Sony	Z5, J5, J6, Z7

Teltonika	ModemUSB/G10
Itegnio	
Fargo Maestro	
<a href="#">Raviraj Technoloties</a>	
<a href="#">Rockwell</a>	RC288ACLW-GSM, RC288ACFLW-GSM
<a href="#">Round Solutions</a>	TER-GX1XX series

If you are concerned only in sending SMSs then the following may also be use. Incoming SMSs are to be explicitly retrieved from the modem by calling GetUnreadSms().

Brand	Model (send only)
Siemens	M1, S25, C35i, SL45, S45, C45, S40, MT50, C55, S55, SL55
Sagem	MC959
Mitsubishi	Galaxy, Neptun, Mars
Bosch	909 Dual, 908-per manual
Motorola	Timeport P7389, P260, TPL7089, Accompli 008, T250

The above are not the exhaustive lists. We will update these in the future as other specifications become available. If the configuration in the list does not work for your brand, try the other configuration. You can also create your own.

## 6. Installation

Download and install "ComPort" (at least v.3) from <http://sourceforge.net/projects/comport/>. A nice serial port component started by Dejan Crnila. Follow its installation instruction.

Remove all previously installed files of EssSMS Library (TEssSMS component) if any. (Component->Install Packages->Remove). Extract the EssSMS\*\*D\*.zip into a new folder. (\*\*-TEssSMS version, \*-delphi version). Set Library Path to new EssSMS\*.dpl folder

(For Delphi 5-7: Tools->Environment Options->Library->Library Path)

(For Delphi 2005: Tools->Options->Environment Options->Delphi Options->Library - Win32->Library Path)

Add EssSMS\*.bpl in Component->Install Packages. A new component tab 'Ess' should now be added for the new VCL.

## 7. Component Configuration

Drop TComPort & TComDataPacket from CPortLib, and TEssSms from Ess.

Update link of the three components as follows:

ComDataPacket1.ComPort = ComPort1

EssSMS1.ComPort= ComPort1

EssSMS1.ComDatapacket=ComDataPacket1

Other CPortLib properties will be updated by TEssSMS.

Copy the INI files to c:\Windows\ or your preferred directory. Update value of TEssSMS.IniFile of which to use EssModelsSR.ini or EssModelsS.ini. If the INIs are saved into another directory, location directory of these files maybe indicated in the value.

## 8. Disclaimer

Even though care has been taken in the design and implementation of this software it cannot be excluded that this software could destroy data in your mobile phone or may even render your mobile phone useless. The author will not be held responsible legally, financially, or in any other form for any kind of damage that might occur from using this software.

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