



SMS Service SL

With this library it is possible to send, receive and delete short messages via a GSM modem.

Product description

SMS Connection Interface

To run the following functions the implementation of the SMS Connection Interface library is needed. See the SMS Service SL Example for one possible implementation. **If the device needs hardware handshake and it is not set in the parameters, this can result in data loss.**

Modem

This function block should represent the physical device. It must only be started once, before the following ones can be used. To start, the pin for the sim card is needed, if it requires one. Otherwise, this variable can stay empty. Additionally the type of connection is needed. Each one of the following function blocks needs this one to work.

Send SMS

This function block sends a short message to a receiver. Therefore the user has to provide the receiver number and text to send. Perhaps the device cannot read out the service center number from the Sim card. In that case the appropriate error is returned and the user has to provide this number. Also the instance of the modem is required for execution

The execution works just as mentioned above.

Receive SMS

This function block can receive a short message. Always the oldest one, which can be found on the device, is returned. The number, message, time, status and index are returned. The status declares if there was a message on the device or not. The index is necessary to delete a short message. Also the instance of the modem is required for execution.

The execution works just as mentioned above.

Delete SMS

This function block can delete one message in the device. The user must commit the short message in the format, as he received it from the device. Also the instance of the modem is required for execution.

The execution works just as mentioned above.

Visualization

The processes of sending, receiving and deleting can also be done with visualization, but not the initialization of the modem.

After entering the number of the receiver and the message, the button has to be pressed for sending. The lamp next to it shows the current status. A yellow one means that the current process is busy. Green means that the message was send and red that a problem occurred.

The other visualization combines the reading and deleting of a short message. The oldest message of the device is displayed. When no message is available a comment is written. Only the currently displayed message can be deleted. The lamps also show the status as mentioned before.

Used AT-Commands

AT+CMGS: Send Message

AT+CMGR: Read Message

AT+CMGL: List Messages

AT+CMGD: Delete Message

AT+CMGF: Message Format

AT+CPMS: Preferred Message Storage

AT+CSCA: Service Center Address

AT+CMEE: Error Message Format

AT+CREG: Network registration

- Send a SMS
- Get first SMS
- Delete SMS

Note to use the internal modem of the control PFC 200 Model 750-8207

Firmware < 11

Create a symbolic link /dev/tty03 to /dev/ttyMdm0 and use COM port 4 to connect. Edit the file /etc/rc.d/S01_link_devices and change the value of GSM_MODEM_TTY_PFCXXX_LINK_NAME to /dev/tty03:

```
Set GSM_MODEM_TTY_PFCXXX_LINK_NAME="/dev/tty03"
```

Firmware >= 11

Change section [SysCom] in file /etc/CODESYSControl.cfg:

```
[SysCom]
```

```
Linux.Devicefile.1=/dev/serial
```

```
Linux.Devicefile.4=/dev/ttyRUNTIME66
```

General information

Supplier:

CODESYS GmbH
 Memminger Strasse 151
 87439 Kempten
 Germany

Support:

Technical support is not included with this product. To receive technical support, please purchase a CODESYS Support Ticket.

<https://support.codesys.com>

Item:

SMS Service SL

Item number:

Sales / Source of supply:

CODESYS Store
<https://store.codesys.com>

Included in delivery:

- CODESYS software and / or license key with billing information
- For training courses and events: Booking confirmation

System requirements and restrictions

Programming System	CODESYS Development System Version 3.5.15.0 or higher
Runtime System	CODESYS Control V3.5.15.0
Supported Platforms/ Devices	All
Additional Requirements	Serial GSM Modem (e.g. Cinterion MC55) or PFC 200 750-8207
Restrictions	-
Licensing	<p>License activation optional on CODESYS Key or Soft Key (Soft Key: free of charge component of CODESYS Controls) Licensing via Soft Key is strictly linked to hardware.</p> <p>Note: Without a license the software runs for 30 minutes in demo mode.</p>
Required Accessories	-

Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.

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