

Manual Reference

OBEX

(Object Exchange Protocol)

for the SIEMENS Mobile Phone

S25

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Revisions Overview

Date	Version	Name	Description of revision
06-10-1999	1.0	Gau	File created

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1. Introduction

OBEX is a protocol for exchanging objects over an infrared link specified in the IrOBEX specification of the Infrared Data AssociationSM.

The Siemens S25 mobile phone supports the OBEX protocol to exchange data with a PC, Laptop, PDA or S25 mobile phone.

2. Overview Objects

The following objects can be handled by the S25. The detailed elements of the objects are described further down.

- vCard: Business Card Object (.vcf)
On users request the S25 sends the business card stored inside to another OBEX device.
Received vCards are stored in the mobile phonebook. The data of the received vCard which are not relevant to a phonebook entry are ignored.
- vCal: Calendar Object (.vcs)
vCal objects can be sent and stored from/in the calendar application of the S25 mobile phone.

The official specification to vCard and vCal can be found at <http://www.imc.org/pdi>.

- MIDI: MIDI file [MIDI format 0] (.mid)
By beaming a MIDI format 0 file you can customize the S25 user-defined ringer melody to your own favorite melody. If the S25 receives a midi file it will convert "on the fly" the notes on MIDI channel 0 to the mobile intern ringer tone format. The reserved memory for the user-defined ringer melody stores up to 150 tones (including breaks).
- Bitmap: Windows bitmap file (.bmp)
The S25 can receive and convert a standard bitmap file as user-defined operator bitmap. The user-defined operator bitmap will be displayed if the mobile is registered in its home network. The bitmap must have a minimum size of 97x26 pixel (bitmaps which extend this size are adapted) and a maximum number of 256 colors. The number of colors will be reduced and converted to the 4 display colors available.
It is recommended to use a bitmap 97x26 pixel with the for colors white, red, green and blue for best results.

3. Supported vCard features

vCard properties which the S25 will process:

N	name in the form surname;first name
TEL	telephone number in the form +country code area code number

If the mobile phonebook is full the vCard object will be ignored.
Up to 3 phonebook entries per vCard object will be stored if there are more than one telephone number in the vCard object.

Examples:

```
BEGIN:VCARD
VERSION:1.0
N:Service-D1
TEL:01300171
END:VCARD
```

```
BEGIN:VCARD
VERSION:1.0
N:Datendiener;Egon
TEL;WORK:+49 89 12345678
TEL;HOME:+49 12345 67890
END:VCARD
```

4. Supported vCal features

The vCalendar object can be either an event or todo entry containing alarm time and description.

At the moment only the ASCII character set is supported, that means CHARSET tag will be ignored. Also the ENCODING tag will be ignored.

vCal properties which the S25 will process:

AALARM	audio alarm in the form JJJMMSSSTHHMMSS, i. e.: AALARM:19981102T135500
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CATEGORIES

ANNIVERSARY	vCal object will be inserted as birthday
MEETING	vCal-object will be inserted as meeting
MISCELLANEOUS	vCal-object will be inserted as memo
PHONE CALL	vCal-object will be inserted as phone call remember, therefore the phone number must be specified in the DESCRIPTION

DALARM	display alarm in the form like AALARM
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DESCRIPTION	description whereby a maximum number of 16 characters will be copied.
DTSTART	start of event same form as AALARM
RRULE	reoccurrence of alarms: D1 -> daily D7 oder W1 -> weekly Y1 -> yearly others will be ignored

Examples:**birthday:**

```
BEGIN:VCALENDAR
VERSION:1.0
BEGIN:VEVENT
CATEGORIES:ANNIVERSARY
DTSTART:19981213T100000Z
DESCRIPTION:W. von Siemens
END:VEVENT
END:VCALENDAR
```

meeting:

```
BEGIN:VCALENDAR
VERSION:1.0
BEGIN:VEVENT
CATEGORIES:MEETING
DTSTART:19981231T220000Z
DESCRIPTION:Party '98/99
END:VEVENT
END:VCALENDAR
```

phone call remember:

```
BEGIN:VCALENDAR
VERSION:1.0
BEGIN:VEVENT
CATEGORIES:PHONE CALL
DTSTART:19981230T212547Z
DESCRIPTION:+49 89 12345678
END:VEVENT
END:VCALENDAR
```

memo:

```
BEGIN:VCALENDAR
VERSION:1.0
```

BEGIN:VTODO
CATEGORIES:MISCELLANEOUS
DTSTART:19981223T140000
AALARM:19981102T135500
DESCRIPTION:buy gifts
END:VTODO
END:VCALENDAR