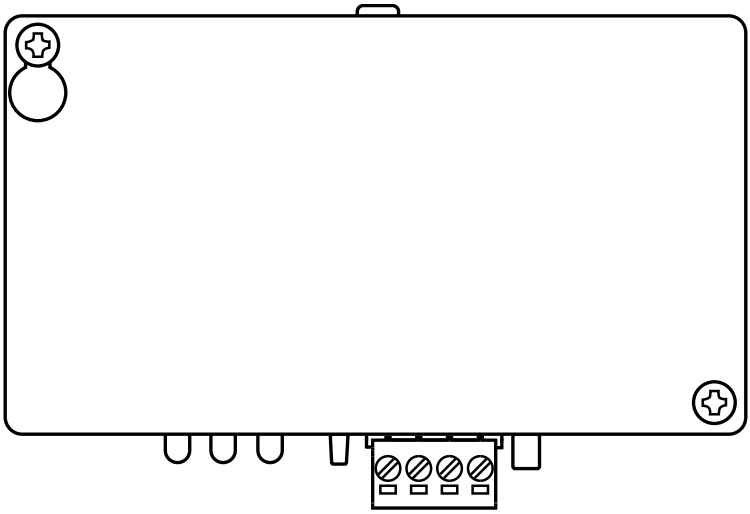
SafeLine

GL1 manual



GSM gateways
www.safeline-group.com

Reliability – brought to you from Tyresö Sweden

09.2020
GL1 & GL1-4G v.2.1.1 EN

Technical data

Power:	Supply voltage: 10-30 VDC
Line Power:	Line voltage: 48 VDC when connected to GSM network.
Current consumption:	12 VDC 250 mA, momentarily when connecting a call. 50 mA at Standby.
Communication:	***GL1** - Supports 2G (900/1800 MHz) ***GL1-4G** - Supports 2G, 3G and 4G (800/900/1800/2100/2600 MHz)
Antenna connector type:	SMA (female)
IP code:	IP20
Dimension:	81 x 121 x 24 mm (H x W x D)
Weight:	220 gram
SIM card	Micro SIM: 15 x 12 x 0,76 mm

Unit is beeing delivered with a 3 m antenna cable, SMA contact (male).
This product is intended for use in EMEA countries.

Content

General information

This unit was built with state-of-the-art technology and to generally recognised safety related technical standards currently applicable. These installation instructions are to be followed by all people working with the unit, in both installation and maintenance.

It is extremely important that these installation instructions are made available at all times to the relevant technicians, engineers or servicing and maintenance personnel. The basis prerequisite for safe handling and trouble free operation of this system is a sound knowledge of the basic and special safety regulations concerning conveyor technology, and elevators in particular. The unit may only be used for its intended purpose. Note in particular that, no unauthorised changes or additions may be made inside the unit or individual components.

Exclusion of liability
The manufacturer is not liable with respect to the buyer of this product or to third parties for damage, loss, costs or work incurred as a result of accidents, misuse of the product, incorrect installation or illegal changes, repairs or additions. Claims under warranty are likewise excluded in such cases. The technical data is the latest available. The manufacturer accepts no liability arising from printing errors, mistakes or changes.

Declaration of conformity
Download "The declaration of conformity" at our website: www.safeline-group.com

Safety Precautions!
- Only trained professionals, who are authorised to work on the equipment, should install and configure this product.

- This quality product is dedicated for the lift industry. It has been designed and manufactured to be used for its specified purpose only. If it is to be used for any other purpose, SafeLine must be contacted in advance.

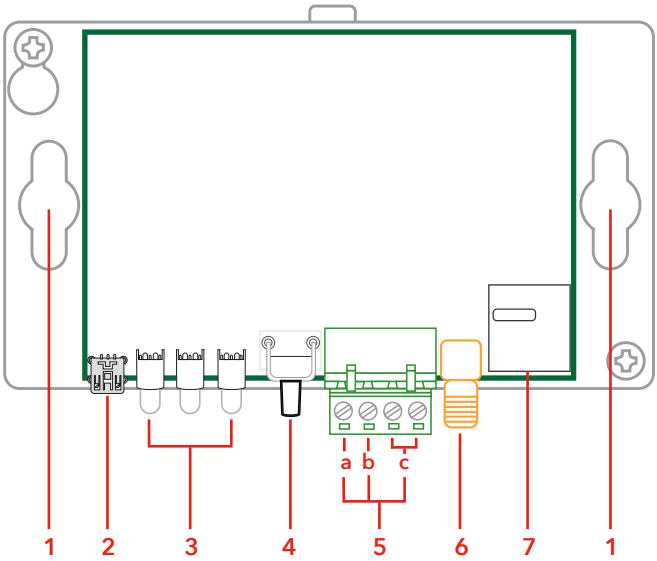
- It should not be modified or altered in any way, and should only be installed and configured strictly following the procedures described in this manual.

- All applicable health and safety requirements and equipment standards should be considered and strictly adhered to when installing and configuring this product.

- After installation and configuration this product and the operation of the equipment should be fully tested to ensure correct operation before the equipment is returned to normal use.

Electrical and electronic products may contain materials, parts and units that can be dangerous for the environment and human health. Please inform yourself about the local rules and disposal collection system for electrical and electronic products. The correct disposal of your old product will help to prevent negative consequences for the environment and human health.

Overview



1. **Holder**
   It is possible to attach the GL1 with either the DIN holder or the optional holder.

2. **Mini USB**
   Use the mini USB connection and the SLPro to update SW.

3. **LED's**
   There are three LED indicators. Refer to "LED Indication".

4. **Reset button**
   Push the reset button for 3 sec to see GSM field intensity.

5. **Terminal**
   Connection for supply voltage of:
   a) 10-30 VDC.
   b) 0 VDC
   c) Telephone line out for SafeLine phones

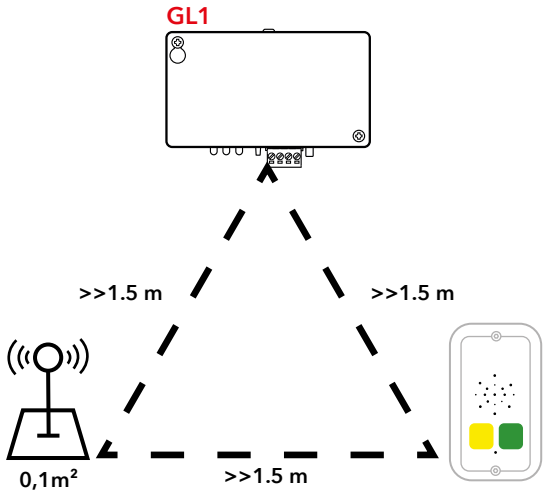
6. **SMA-antenna connector**
   The SMA-antenna connector type is female.

7. **SIM-card holder**
   The unit is using a micro SIM card.

Installation

Connecting the unit

To avoid GSM interference: Place the GL1, the lift emergency telephone and the GSM antenna at least 1,5 m apart.



Network services

Only applicable for *GL1: before you can start using a new SIM card, the card has to be prepared and support 2G network. Cards that only support 3G/4G will not function.

Only applicable for *GL1-4G: network services may differ from country to country and/or service providers. Contact your service provider for more information about 4G and VoLTE in your specific region.

Using the SIM card

If you enter the wrong PIN code 3 times, the SIM card will be blocked (requires PUK code to de-block). The GL1 cannot be started and the LED3 will be red.

- If the PIN code is set to "1234", "0000" or if it is deactivated the SIM card can be moved from the SafeLine GL to any of the SafeLine GSM products.
- If the PIN code is set to "1111" the SIM card cannot be moved to any other telephone (SafeLine or otherwise) without the PUK code.

Do not activate the voicemail or if possible ask your provider to deactivate the voicemail.

If the PIN code is set to "1111" the SIM cards code will be randomly changed by the SafeLine GSM unit and memorised. This way the SIM card can only work with the SafeLine GSM unit unless you use the PUK code for setting up a new PIN code.

If you want to upload a new SIM card with PIN code "1111" you will need to first upload a SIM card with PIN code "1234" or "0000" this to clear the old code in memory.

PIN code (set to "1234", "0000" or deactivate).

1. Insert the SIM card in an ordinary mobile phone. In the "Security settings" menu, change the PIN code to "1234", "0000" or set the "PIN code request" option to "OFF".
   NOTE! "0000" can not be use on all SIM cards. Please contact your service provider for details.
2. Verify the PIN code by switching your phone off and on again.
3. Make a call from your phone to verify that the SIM card is active, before you move it to the SafeLine GL1.
4. Also make a call to SafeLine GL1 after insertion of the SIM card, to check that it is possible to get a proper connection.

Protect the SIM card against unauthorized use.

1. Insert the SIM card in a mobile phone.
2. In the "Security settings" menu, change the PIN code to "1111". When the SIM card is inserted in the SafeLine unit, the code will be changed to a random number, thus making it impossible to use the card in another mobile phone unless it is unblocked by means of the PUK code.

LED Indication

LED1, indicates the power supply status

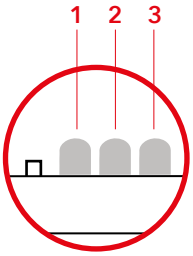
Continuous green	Power supply OK.

LED2, indicates GSM strength

Indicates GSM strength and recieving audio level, RX-level (please refer to the tables).

LED3, indicates communication

Continuous red	GSM error.
Flashing red (400/400 ms)	Searching for GSM network.
Flashing yellow/green (100/100 ms)	Incoming call.
Continuous green	Call connected.
Flashing green (400/400 ms)	Call connection in progress.
Slowly flashing green (200/4600 ms)	GSM network OK.
Flashing green (100/100/100/2200 ms)	Handset not applied to/put on the unit correctly.



LED

LED 1	2	3	GSM Signal Strength
			= 100 %
			= 85 %
			= 70 %
			= 55 %
			= 30 %*
			= 15 %
			= 0 %

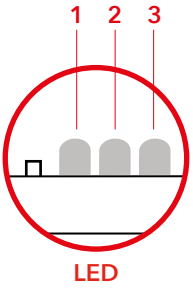
*Minimum signal strength for using GSM interface.

Increase RX audio level

It is also possible to adjust the settings via SLPro, under the GL6 tab.

Increase the GSM receiving audio level by using of the setup mode.

1. To enter setup mode, first disconnect the power.
2. Then press the button and hold while restarting power and then for a further 3 seconds without letting go. The setup mode is now active.
3. To setup the GSM receiving audio level press the button to reach desired output level. The increase is in steps of 25% per push.
4. When the desired level is reached, turn off the power.
5. Then restart the unit. The new GSM receiving audio level is now stored.



LED 1	LED 2	LED 3	RX audio level
			= 0 %
			= 25 %
			= 50 %
			= 75 %
			= 100 %

Trouble-shooting

LED1 is not lit when when the unit is connected to supply voltage.

- Check the supply voltage polarity.
- Make sure that the supply voltage is 10-30 VDC.

LED3 is lit, continous red.

- Make sure that the SIM-card is correctly positioned.
- Check that the SIM-cards PIN-code is deactivated or that the PIN-code is set to ”1234”, ”0000” or ”1111” (see the section SIM-card).
- Make sure that the SIM–card is activated and works by testing the card in an mobile phone.

The call is interrupted directly after being connected.

- If the unit is powered from a battery make sure the battery is properly charged.
- Make sure that the main power supply can deliver 300 mA continuous current.

Call can not be connected! Error message from telephone operator.

- To make a call, area code must always be used.

Interference/ poor sound quality

Bear in mind that the wiring between GL and the lift telephone/ phone is basically a standard PSTN-line and can therefore not be placed in the lifts travelling cable together with high voltage. ***(Risk of interference)***

- Always place the antenna in an upward position and at least 1,5 m from GL.
- Place the antenna where the highest field intensity is obtained according to the table ("LED Indication") for the unit.
- When a call is connected try placing the antenna in different places to find where the best receiving/sending position is.

EU Declaration of Conformity

Product:	Mobile network emulator
Type / model:	**Safeline GL1**
Article no:	*GL1, *GL1-4G
Manufacturer:	SafeLine Sweden AB
Year:	2020

We herewith declare under our sole responsibility as manufacturer that the products referred to above complies with the following EC Directives:

Directives

Radio Equipment (RED):	2014/53/EU
RoHS 2:	2011/65/EU

Standards applied

EN 12015:2014	EMC: Emission, Electromagnetic compatibility
EN 12016:2013	EMC/Lifts: Immunity, Electromagnetic compatibility
EN 62368–1:2014/AC:2015	LVD: Information Technology Equipment
EN 50581:2012	RoHS: Technical doc. for assessment of restriction of RoHS.

For RED 2014/53/EU, the conformity assessment procedure "Module A" used as described in Annex II. Accordingly, respective manufacturer has done the radio modules conformity assessment:

Standards applied	Article of Directive 2014/53/EU
EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013 EN 62311:2008	3.1 (a): Health and safety of the user

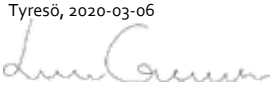
Module	Notified body	Address	NB nr	Test nr
GL865-Dual V3	Dekra Test &Cert	Parque Tecnologico de Andalucia / SeveroOchoa 2, 29590 Spain	1909	53051 RBN.001
LE910C1-EU	Dekra Testing and Certification	Parque Tecnologico de Andalucia / Severo Ochoa 2, 29590 Málaga, Spain	1909	57536RNB.001A1

EN 301 489-1 v2.1.1 + EN 301 489-52v1.1.0 Draft	3.1 (B): Electromagnetic Compatibility
EN 301 511 v12.5.1	3.2: Effective use of spectrum allocated

Firmware used during assessment

GL865-Dual V3:	16.00.152 / 16.01.150 / 16.01.153
SafeLine GL1:	1.00

Tyresö, 2020-03-06



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