



GSL 4G Controller

Equipment: Access Control
Model: GateController v3.0

4G LTE Controller

230VAC / 5W



Gate opening via phone call or message

Adjustable relay pulse duration

Supports up to 200 users with the possibility of expansion

Low electrical power consumption

Simple input of phone numbers via SMS message

SYSTEM DESCRIPTION

The **GSM Gate Controller** is a device designed for remote control of gates via phone calls or SMS commands. Configuration and management are performed exclusively through SMS messages, allowing administrators to manage users, configure inputs/outputs, and set alarm calls. The device requires an unlocked SIM card (without a PIN code) with unlimited calls and SMS messages for optimal operation. Insert the SIM card before powering on the device.

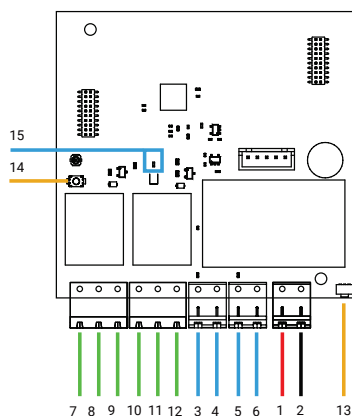
Key Features:

- **User Management:** Adding/removing admin and user phone numbers, with administrative access to commands
- **Input Configuration:** Activation of inputs to high/low logic levels with customizable SMS notifications
- **Output Configuration:** Support for multiple output modes (impulse, continuous, timed) with adjustable duration and intervals
- **Alarm Calls:** Configurable alarm calls triggered by input events
- **SMS Message Limit:** Device configuration messages are limited to 60 characters
- **Priority User Call:** When any input is activated, the device can automatically call a designated user for rapid response

TECHNICAL SPECIFICATIONS

Power supply / Consumption:	230VAC / 1W
GSM Frequency:	4G LTE (EMEA) + 2G GSM Fallback
Number and Type of Outputs:	2 / relay
Number and Type of Inputs:	2 / relay
Relay Characteristics:	250VAC, 30VDC - 5A
Dimensions with housing:	100 x 100 x 40 mm
Operating temperature:	-25°C ~ +60°C

MAIN UNIT, WIRING DIAGRAM WITH CONTACT DESCRIPTION



TERMINAL		DESCRIPTION
S. Number	Name	
1	AC IN / L	Input for connecting the phase wire from the power supply
2	AC IN / N	Input for connecting the neutral wire from the power supply
3	IN 1	Relay input
4	COM1	COMMON
5	IN 2	Relay input
6	COM2	COMMON
7	NO 1	Relay output (normally open contact)
8,11	COM1,COM2	COMMON for relay outputs
9	NC1	Relay output (normally closed contact)
10	NO2	Relay output (normally open contact)
12	NC2	Relay output (normally closed contact)
13	SW1	Push button for device reset
14 *	SW2	Button* for restoring the device to factory settings (hold for 10s)
15	LED	Network presence indicator (slow blinking ~1.5s / network found) (fast blinking ~0.5s / searching for network)

*To reset the Gate Controller device to factory settings, press and hold the button indicated in the diagram for more than 10 seconds. After that, the device will reset and return to the default values.



LIST OF COMMANDS FOR USER MANAGEMENT

Adding an Admin Number:

Command: **ADD_ADMIN:+3816xxxxxxx**

The first number to send this message becomes the admin.

Only admins can add or remove admins and users, as well as configure the device.

Removing an Admin Number:

Command: **REMOVE_ADMIN:+3816xxxxxxx**

Adding a User:

Command: **ADD_USER:+3816xxxxxxx**

Removing a User:

Command: **REMOVE_USER:+3816xxxxxxx**

Display Admin Number List:

Command: **ADMIN_LIST?**

Display User Number List:

Command: **USER_LIST?**

LIST OF COMMANDS FOR DEVICE CONFIGURATION

INPUT CONFIGURATION

Inputs (IN1 and IN2) can be configured to activate on either high or low logic levels, with customizable SMS message text sent to users upon activation. Inputs can also be deactivated.

Trigger on Low Logic Level:

Command: **SET_INx_LOW:Notification text**

X indicates the input number (1 or 2).

Text that users will receive via SMS when the trigger occurs.

Trigger on High Logic Level:

Command: **SET_INx_HIGH:Notification text**

X indicates the input number (1 or 2).

Text that users will receive via SMS when the trigger occurs.

Input Deactivation:

Command: **SET_OFF:INx**

X indicates the input number (1 or 2).

This also automatically disables the alarm call for that input.

ALARM CALL SETTINGS

Activating Alarm Call:

Command: **INx_ALARM_CALL_ON:+3816xxxxxxx**

X indicates the input number (1 or 2).

The specified number will be called when the trigger occurs.

If the number is not on the admin or user list, it will be automatically added as a user for notification purposes.

Deactivating Alarm Call:

Command: **ALARM_CALL_OFF:INx**

X indicates the input number (1 or 2).

OUTPUT CONFIGURATION

Outputs (NO1/NC1 and NO2/NC2) support multiple operating modes, including impulse, continuous, and timed operations. Each mode can be configured with specific durations and intervals.

NOT_USED

Command: **SET_OUTx:0**

X is the device output, can be defined as 1 or 2.

Working mode: NOT_USED

Output is turned off, not in use.

IMP_UNLOCK

Command: **SET_OUTx:1/IMPULSE:5**

X is the device output, can be defined as 1 or 2.

X is the device output, can be defined as 1 or 2.

Impulse signal with configurable duration (see Table 2), without any restrictions. Each user call generates an impulse.

NOTE: If IMPULSE is not specified, the default duration is 500 ms.

**IMP_LOCK****Command:** SET_OUTX:2/IMPULSE:3

X is the device output, can be defined as 1 or 2.

impulse signal with configurable duration. The first call generates an impulse, and the next is accepted only after a repeated call from the same number.

NOTE: If IMPULSE is not specified, the default value is 4 (500 ms).**IMP_T****Command:** SET_OUTX:3/IMPULSE:3/TIME:1

X is the device output, can be defined as 1 or 2.

Impulse signal with configurable duration. The impulse automatically repeats after a specified time interval (see Table 3).

NOTE: If IMPULSE is not defined, the default value is 4 (500 ms); if TIME is not defined, the default value is 3 (60 s).

TABLE 2	
CODE	VALUE [ms]
0	0
1	50
2	100
3	200
4	500 (Default)
5	750
6	1000
7	1500
8	2000

SW_UNLOCK**Command:** SET_OUTX:4

X is the device output, can be defined as 1 or 2.

The relay is switched on continuously. Each call from any user toggles the relay state.

SW_LOCK**Command:** SET_OUTX:5

X is the device output, can be defined as 1 or 2.

The relay is switched on continuously. Only the same user number that activated it can change the relay state.

TABLE 3	
CODE	VALUE [s]
0	0
1	15
2	30
3	60 (Default)
4	90
5	120
6	300
7	600

SW_TIME**Command:** SET_OUTX:6/TIME:1

X is the device output, can be defined as 1 or 2.

The relay is activated by a user call and automatically switches off after a specified time (see Table 3).

OUTPUT ACTIVATION TEXT CONFIGURATION**Output Activation Text:****Command:** SET_OUTX_ON_TEXT:Text example

X is the device output, can be defined as 1 or 2.

Example of text activated when the selected output is triggered.

Example: "SET_OUT1_ON_TEXT:Light is turned on"**Output Deactivation Text:****Command:** SET_OUTX_OFF_TEXT:Text example

X is the device output, can be defined as 1 or 2.

Example of text activated when the selected output is deactivated.

Example: "SET_OUT1_OFF_TEXT:Light is turned off"**TECHNICAL NOTE**

- Default Values: Impulse duration is 500 ms (code 4), time interval is 60 s (code 3) if not specified.
- Security: Only admins can send configuration commands. The first admin is set using the ADD_ADMIN command.
- SMS Limitation: Messages are limited to 60 characters.
- SIM Card: Use an unlocked SIM card with unlimited calls and SMS, inserted before powering on the device.
- Strictly follow the command format and do not use spaces when sending commands.

- LED Status Indicator:

- Fast blinking red LED: The device has no network connection and is trying to establish one.
- Slow blinking red LED (~1 second on/off): The device is stably connected to the network.

The device must be installed in a protective enclosure to shield it from atmospheric conditions. Use wiring up to 2.5 mm² thickness for connecting to the terminals.



IMPORTANT NOTE

This technical documentation is intended solely for the correct use of the GSM Gate Controller. The manufacturer is not responsible for any damage, loss, or injury resulting from improper installation, use, or neglect of the instructions specified in this documentation.

SAFETY INSTRUCTIONS

Installation: The device must be installed only by qualified personnel in accordance with local electrical regulations. Always disconnect power before installation.

SIM Card Usage: Use an unlocked SIM card without a PIN code. Ensure the SIM card is inserted before powering on the device.

Environment: The device is not intended for use in humid, dusty, or extreme temperature conditions. Protect the device from direct exposure to water and mechanical damage.

Maintenance: Do not open the device unless explicitly stated in the documentation. Unauthorized opening may void the warranty.

Compliance with Instructions: Carefully read and follow all instructions in this documentation to ensure proper device operation.

DISCLAIMER

- The manufacturer does not guarantee uninterrupted operation of the device in cases of network overload, power outages, or SIM card malfunctions.
- The manufacturer is not responsible for any indirect, incidental, or consequential damages resulting from improper use of the device, including but not limited to data loss or material damage.
- The user is responsible for verifying the device's compliance with local regulations and standards prior to installation and use.
- Device specifications and functionalities are subject to change without prior notice. The manufacturer reserves the right to improve the

CONTACT AND SUPPORT

For additional questions, technical support, or to report issues, please contact the manufacturer or authorized distributor. Contact details are available on the manufacturer's official website.

Warning: Improper use of the device may result in malfunction or hazards. Always follow the safety instructions and use the device according to its intended purpose.