



Complete Guide

Web app, dashboard, apps and SMS commands

BGates AI 4G · Ed. 10/2026 · Rev. 1.1 · English



Made in Italy



Bluetooth



VoLTE

90-240 V AC

4 DIN

Two ways to use BGates AI 4G

BGates AI 4G opens gates, doors and entrances, and its relay can switch any load. There are two ways to use it, depending on which SIM is fitted, and this guide is organised accordingly: **Part A** if you use the BGates SIM on one of our plans, **Part B** if you use your own SIM and control the device by SMS.

A

With the BGates ALLEUROPE IOT SIM

Pre-installed: you just need to activate it. The device is always online: you open it and check its status from the web app, and manage users and settings from the dashboard. Commands are sent over mobile data, so no configuration SMS is needed.

B

With your own SIM

You need a voice SIM with VoLTE enabled. To open, you call the SIM's number (calls are always free of charge); you program the device by SMS, with GT Manager (*) or with the BGates GT app (*).

Contents

Installation

Inserting the SIM · antenna · wiring

A

With the BGates SIM

A1 Plans · A2 Activating with SIM Activator · A3 Web app · A4 Dashboard · A5 Bluetooth app

B

With your own SIM: SMS commands

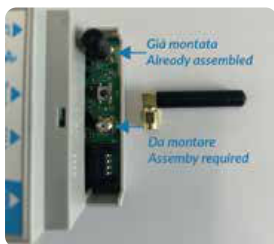
B1 Preparing the SIM · B2 Command syntax · B3 Getting started · B4 Authorised numbers · B5 Relay modes · B6 Time slots and dates · B7 Thermostat · B8 Notifications · B9 Auxiliary input and output · B10 Status and diagnostics · B11 Firmware updates and clock · B12 Reply messages · B13 Resetting

Specifications and contact details

Technical data · QR codes · support · warranty

Installation

This applies to both options. Mount the device on a DIN rail and complete all the wiring before powering up.

**A****B**

The LTE antenna must be fitted in both cases. The Bluetooth antenna comes pre-fitted.

- Power supply L / N 90–240 V AC.
- Relay contacts C / NO / NC to the START (step-by-step) or PEDESTRIAN input of the gate control unit, or directly to the load.
- Screw the GSM and Bluetooth antennas in place before powering up.

B

Own SIM only (VoLTE enabled): inserting the SIM



Gently push the upper flap inwards to open the SIM holder.



Lift the SIM holder flap.



Slide the SIM (standard size) into the upper flap, chip facing down.



Lower the flap and slide it outwards until it clicks into place.

With the BGates SIM (option A) the SIM is already inside the device: do not open the SIM holder.



PART A

With the BGates ALLEUROPE IOT SIM

Pre-installed: you just need to activate it. It connects to whichever available network has the strongest signal.

A1 Available plans

You choose your plan during activation (see A2). You can pay monthly or annually; paying annually works out cheaper.

SIM BGates Smart

from €3.99/month incl. VAT · for individuals

Annual: €47.88 a year instead of €59.88 (save €12.00).
Plus a one-off SIM activation fee of €9.99, charged on the first invoice only.

- BGates ALLEUROPE IOT SIM: connects to the network with the strongest signal
- Up to 500 users included, invited by WhatsApp
- Open with a free call from your mobile
- Open over the Internet with the BGates AI web app
- Device configuration from the BGates AI web app
- User management from the web app, **without** per-user access rules
- Bistable (latching) mode with timer
- Scheduled bistable mode (time slots)
- Bluetooth opening with the BGates GT app (*), sold separately: €5.99 on iOS, €4.99 on Android, one-off per user
- 2-year device warranty

SIM BGates Business

from €6.99/month + VAT · VAT-registered businesses only

Annual: €83.88 + VAT a year instead of €107.88 (€8.99/month; save €24.00).

Plus a one-off SIM activation fee of €29.99 + VAT, charged on the first invoice only.

- BGates ALLEUROPE IOT SIM: connects to the network with the strongest signal
- Up to 1,000 users included, invited by WhatsApp
- Open with a free call from your mobile
- Open over the Internet with the BGates AI web app
- Device configuration from the BGates AI web app
- User management **with** per-user access rules: days, times, from/to dates
- Bistable (latching) mode with timer
- Scheduled bistable mode (time slots)
- iOS and Android app for Bluetooth opening included
- Device backup and restore
- Access log
- Device grouping
- 5-year device warranty

(*) Chargeable services, billed per use or per user.

A2 Activating with SIM Activator

Start here: the device carries a SIM ACTIVATOR label with a QR code and its serial number (BG...). Scan the QR code with your phone's camera to open SIM Activator (activator.bgates.it), already linked to your device.

Activation takes just a few steps and under two minutes. Once it is complete, the device is online and shows up in your web app and dashboard.

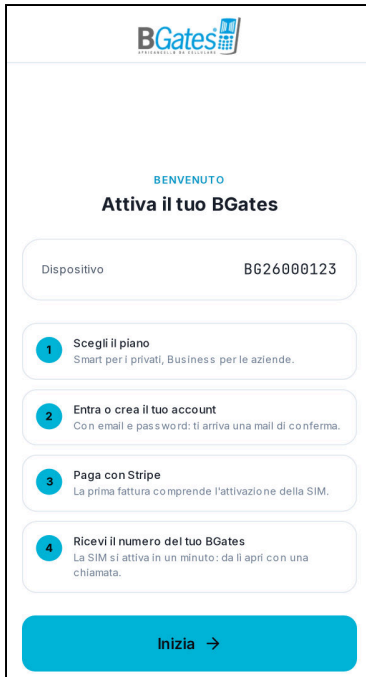
The label shown is an example: every device has its own unique QR code.

SIM ACTIVATOR

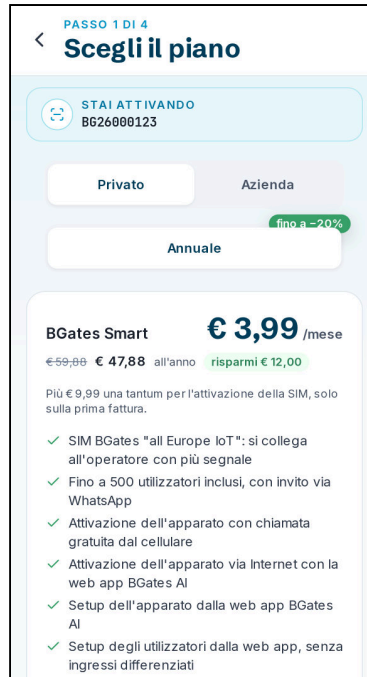


BG26000000

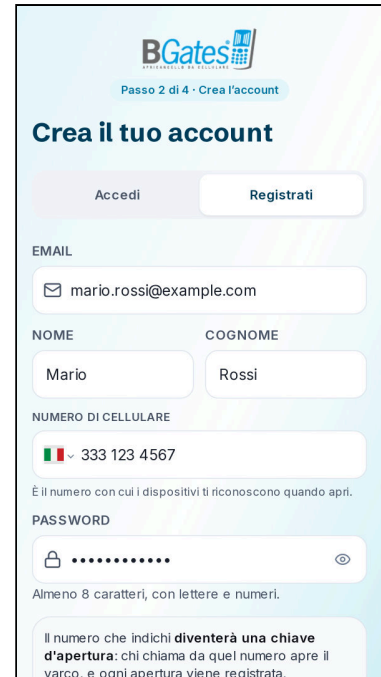
Titolare: Business Gates S.r.l. · Informativa
app.bgates.it/informativa-utilizzatori



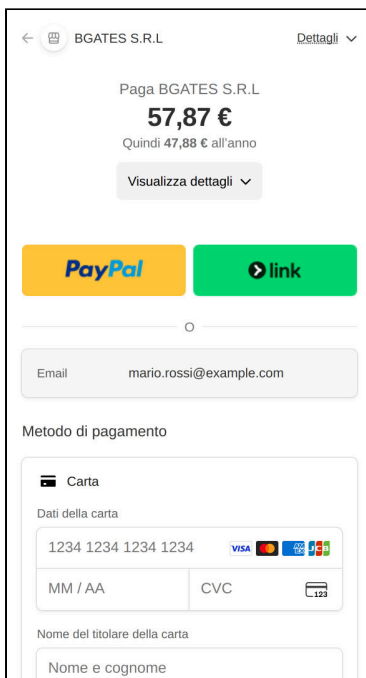
- 0 Welcome: SIM Activator recognises the device from its serial number and shows the four steps. Tap Get started.



- 1 Choose your plan: Smart for individuals (SIM BGates Smart) or Business (SIM BGates Business, VAT-registered businesses only), monthly or annual. Tap Choose this plan.



- 2 Create your account with your email, name, mobile number and a password, or Sign in if you already have one. The mobile number you enter also becomes a key that opens the gate.



- 3 Pay by card, PayPal, Apple Pay or Google Pay on Stripe's secure checkout page. The total covers the plan plus SIM activation (first invoice only).



- 4 Activation in progress: keep the page open. SIM Activator checks the payment, activates the SIM and assigns the number. This usually takes less than a minute.



- ✓ Your BGates is ready: this is the number to call to open. Tap Call now to test it, or Save to contacts.

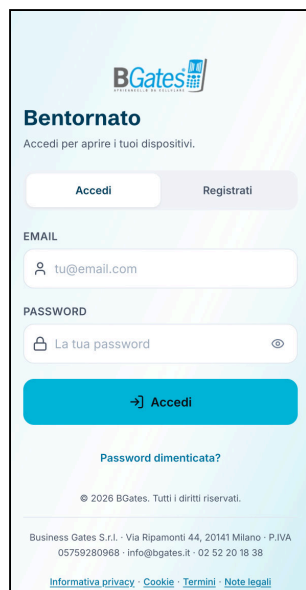
The device now appears in the web app and the dashboard: invite the people who need access (A4). Screenshots show sample data.

A3 BGates AI web app · for users

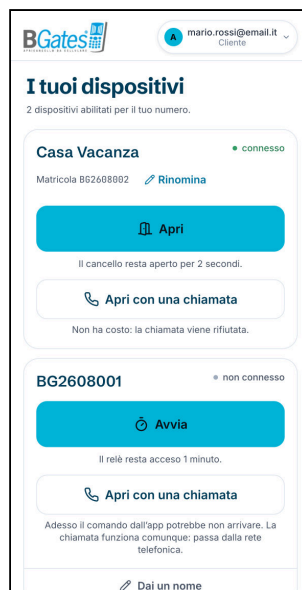
app.bgates.it · runs in the browser on any phone, with nothing to install. Each authorised user receives a WhatsApp message (or an SMS if they don't use WhatsApp) with the number to call and a sign-in link, or a QR code to scan instead.



- 1 The invitation: once you have been authorised, you get a WhatsApp message (or an SMS if you don't use WhatsApp) with the number to call and a link to activate the app.



- 2 Sign in with email and password, or Sign up.

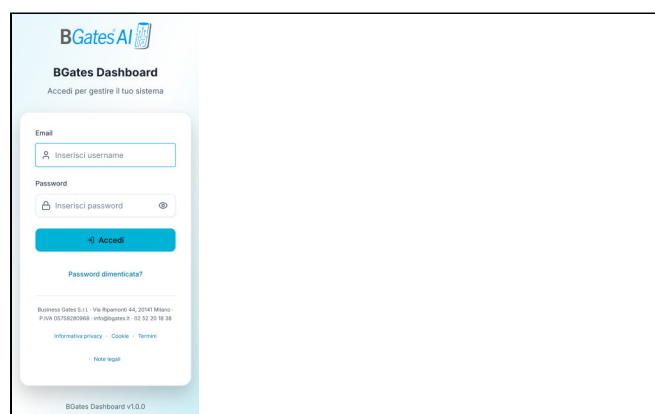


- 3 Your devices: every device you are authorised to use, with its status: online / offline.

- 4 Open (pulse): the gate stays open for the set time. If the device is in bistable or timer mode, the button changes to Start (e.g. 'The relay stays on for 1 minute').
- 5 Open with a call: call the device's number. It's free, because the call is rejected, and it works even when there is no data connection.
- 6 Rename / Name it so you can tell your entrances apart at a glance. Add the web app to your home screen and it opens just like an app.

A4 Dashboard · for managers

dashboard.bgates.it · on a computer, tablet or phone. This is where the manager authorises numbers, sends invitations, opens the gate and changes settings. The dashboard turns your choices into commands and sends them to the device over mobile data, so you don't need to know the SMS commands in Part B. With a single device you land straight on its page; with several, you start from the list. There are four pages: Registered users, Contacts, History and Device.



- 1 Sign in with the account you created during activation.

Data Creazione	Cellulare	Descrizione	L	M	G	V	S	D	Orario	Validità	Stato	Azioni
11/06/2026	347 088 1889	---	x	x	x	x	x	x	Sempre	Illimitata	Attiva	...
30/08/2026	+39 347 088 3818	Mario Rossi	x	x	x	x	x	x	Sempre	Illimitata	Attiva	...
26/08/2026	+39 347 088 3811	Laura Bianchi	x	x	x	x	x	x	Sempre	Illimitata	Attiva	...
20/08/2026	347 088 3812	Giulia Verdi	x	x	x	x	x	x	Sempre	Illimitata	Attiva	...
06/08/2026	347 088 3813	Luca Neri	x	x	x	x	x	x	Sempre	Illimitata	Attiva	...
05/08/2026	347 088 3814	Diplo	x	x	x	x	x	x	Sempre	Illimitata	Attiva	...
05/08/2026	347 088 3815	Portineria	x	x	x	x	x	x	Sempre	Illimitata	Attiva	...
05/08/2026	347 088 3816	Marco Gatto	x	x	x	x	x	x	Sempre	Illimitata	Attiva	...

- 2 Registered users: the authorised numbers with their days, times, validity and status. At the top you can see how many you have used out of your plan's limit; requests from the QR code are listed first, with 'Approve' and 'Decline'.

Authorising a number

- 1 Tap **Add number** (on a phone: '+' → 'Enter the number').
- 2 Select the country, then enter the number and the person's name. For a foreign number, make sure you pick the right country: with the wrong country code the message won't get through.
- 3 When they can open: days, time slot and validity period (Business plan). By default, the number has unrestricted access.
- 4 Tick 'I've informed the person...' and tap **Authorise number**.
- 5 The person receives a WhatsApp message with the link, or an SMS if they don't use WhatsApp.

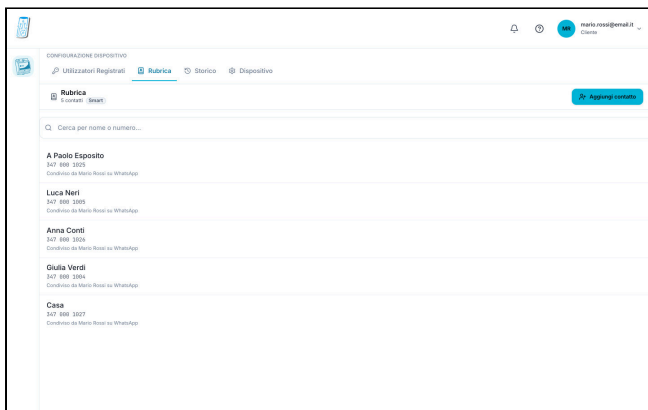
You can also pick the number from **Contacts**: tap a contact and the form opens pre-filled.

Suspending, re-inviting, removing

From the menu on each row (⋮): **Edit** (the 'Number active' switch suspends the number without deleting it; this is also where you change the name, times and validity), **Re-invite** (resends the message with the link), **Reactivate**, **Delete** (removes the number from the device; this cannot be undone).

Invite QR

Create invite QR (on a phone: '+' → 'Invite QR'). **Permanent QR**: available as a PDF flyer, PNG or link; anyone who scans it leaves their name and number, and the invitation is only sent once you tap 'Approve'. 'Revoke' disables the QR and creates a new one. **Personal invites**: choose how many you need, tap 'Create invites', then 'Print to hand out'. Each slip can be used only once and authorises whoever scans it immediately. A photo of a slip works just as well as the original, so hand them out in person.



- 3 **Contacts**: your address book, shared across all your devices. Add contacts manually, from your phone, from a .vcf file, by sharing them via WhatsApp or from an Excel spreadsheet (downloadable template).

Or	Comando	Sts	Canale	Esito	Risposta del dispositivo	Azione
GIOVEDÌ 14 SETTEMBRE 2020	14:44 Apertura (impulso 2 s)		347 000 1001	MITT	Eseguito	Dispositivo: eseguito — Apertura (impulso 2 s) Dettaglio
MERCOLEDÌ 23 SETTEMBRE 2020	14:51 Ping (verifica presenza)	zz-verifica		MITT	Eseguito	Dispositivo: raggiungibile — segnale GSM 25,51, Timestamp 2.3.307 Dettaglio
	13:57 Apertura (impulso 2 s)	Installazione		MITT	Eseguito	Dispositivo: eseguito — Apertura (impulso 2 s) Dettaglio
	13:56 Apertura (impulso 2 s)	Partneria — 347 000 1007		MITT	Eseguito	Dispositivo: eseguito — Apertura (impulso 2 s) Dettaglio
MARTEDÌ 22 SETTEMBRE 2020	17:32 Revocato accesso a 347 000 1031	Installazione		MITT	Eseguito	— Dettaglio
	17:32 Revocato accesso a 347 000 1031	Installazione		MITT	Eseguito	Dispositivo: eseguito — Revocato accesso a 347 000 1031 Dettaglio
	17:31 Revocato accesso a 347 000 1031	Installazione		MITT	Eseguito	Dispositivo: eseguito — Revocato accesso a 347 000 1031 Dettaglio

- 4 **Command history**: every command with its time, sender, channel and outcome. Tap 'Details' to see the device's reply. Filter by text and date, or tap 'Export CSV'. Records are kept for 12 months.

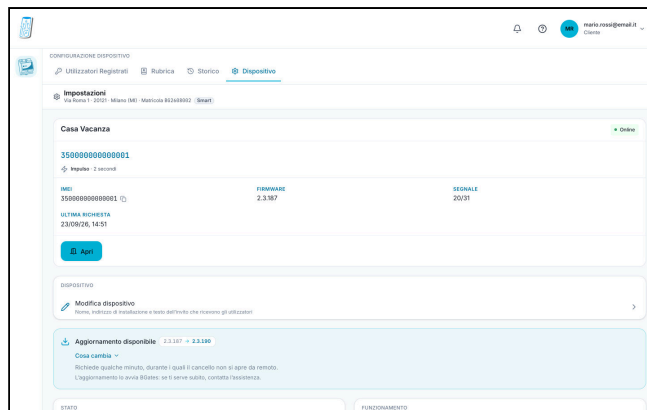
'Sent' means the command has gone out, not that it has been carried out: only 'Done' confirms that. A per-user opening log is included in the Business plan.

Opening and settings · Device page

The command button at the top of the page changes according to the mode:

- Pulse: 'Open'.
- Bistable: green 'On' or red 'Off'; tap to toggle.
- Timer: 'Start timer · N minutes'; while running it shows 'Switches off in...'.
● Thermostat: no manual control; it just shows the relay status.

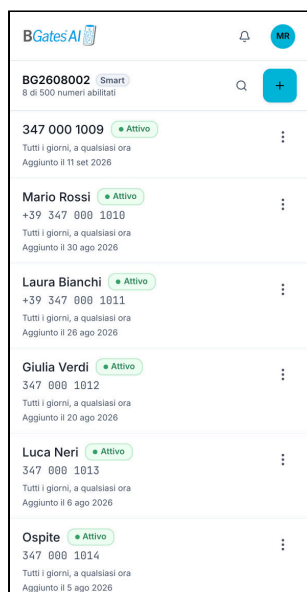
If the device doesn't respond within 20 seconds, the button becomes available again and the outcome appears later in History. During a time slot, manual commands are rejected.



- Operation: relay mode (pulse or bistable) and active function: none, Timer, Scheduled (time slots), Thermostat. Only one can be active at a time; each setting is sent only when you confirm it.
- Time slots: with 'Scheduled', the relay stays on during the slots you choose ('Set time slots': one or two slots per day, or 'Days without a slot'). The end hour is inclusive: 8–19 runs until 19:59. To restrict just one person you don't need time slots: use 'When they can open' on their number.
- Status: 'Refresh status' (signal, firmware, relay, mode), 'Check date and time', 'Download latest openings'.
- Advanced: Smart Start, rings before answering, pulse in tenths of a second, automatic restart, temperature reading, sending missing numbers to the device.
- Maintenance (in red, always asks for confirmation): numbers on device, device phone list, restart, reset (keeps the numbers) and factory reset (also deletes the numbers).
- Edit device: name, installation address and the invitation text sent to authorised users.
- Firmware updates: when a new version is out, an 'Update available' panel appears. While the update is running (a few minutes), the gate can't be opened remotely.

From your phone

The dashboard also works on a phone, with the four pages in the bottom bar. You can install it like an app: on iPhone, open the link in Safari → Share → 'Add to Home Screen'; on Android, tap 'Install'.



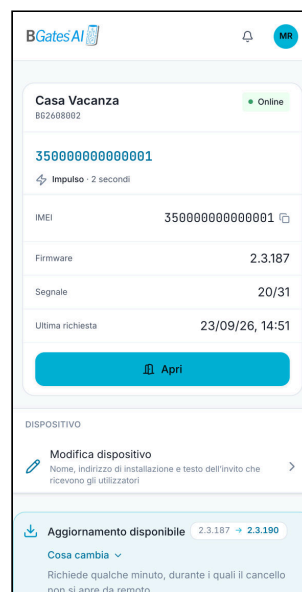
Registered users



Contacts



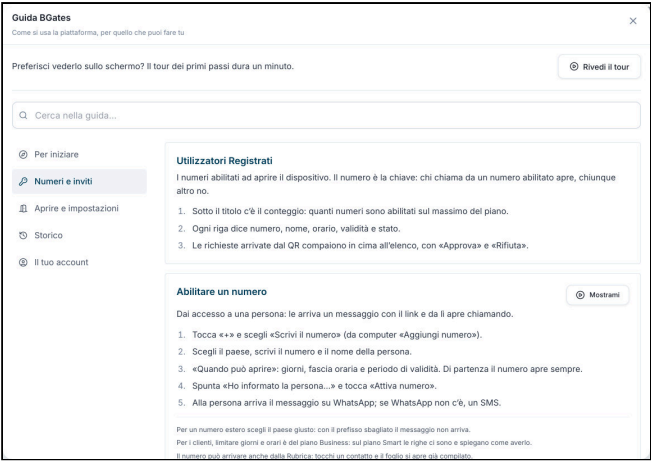
History



Device

Your account and the built-in help

- **Profile:** avatar menu, top right → 'Profile'. 'Change password' signs you out of all open sessions. Your phone number can't be changed here, because it is the key you open with.
- **My subscription:** your plan, invoices and payment method.
- **Legal documents and your data:** accepted documents, 'Export your data', 'Delete your account'.
- **Notifications:** the bell icon. We alert you when a BGates isn't responding, a command fails or someone accepts an invitation.
- **Setup assistant:** takes you to the right screen and prepares the changes for you; nothing is sent until you confirm.
- **BGates help (?):** the built-in guide, with sections on Getting started, Numbers and invites, Opening and settings, History and Your account. 'Replay the tour' runs the introductory tour again.



Feature summary

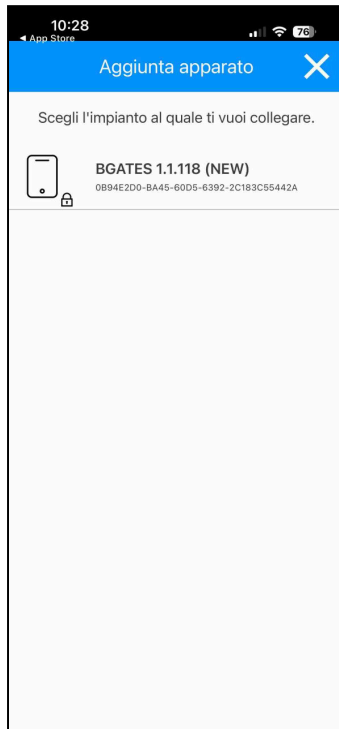
FEATURE	HOW
Opening and relay control	Button on the device page: pulse, on/off, timer. Confirmation comes back within a second.
Users	Up to 500 named numbers (Smart) or 1,000 (Business). Business adds per-user access rules by day, time and date range.
Invitations	Each user gets a link to open from the web app, by WhatsApp and email, or a QR code to scan.
Scheduling	Daily time slots during which the gate is held open (up to two per day).
Thermostat	Set temperature, frost protection and live temperature reading.
Live status	Online/offline, signal, relay, temperature, latest commands and replies.
Firmware updates	From the dashboard, with the version history.
Backup and restore Business	Numbers and settings are saved on the server and can be restored to a replacement device.
Access log Business	Who opened, when and how.
Device grouping Business	Manage several devices together (e.g. all the entrances of one building).

A5 Bluetooth app · opening at short range

For opening from nearby, even with no mobile data. On SIM BGates Smart you use the BGates GT app (*); on SIM BGates Business, the BGates Business app (iOS · Android) is free and included for up to 500 users.

BGates GT · Smart plan

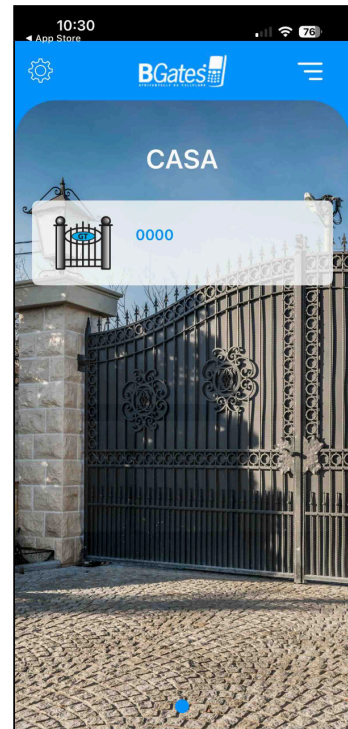
The BGates GT app (*) adds Bluetooth opening to the Smart plan. Install it from the App Store or Google Play and allow Bluetooth access when you first launch it. To add the device, go to the menu (three lines, top right) → 'My systems' → '+'.



- 1 Add the device: select the BGates detected nearby, then enter your phone number.



- 2 Name and PIN: give the entrance a name and enter the system PIN (factory default 0000).



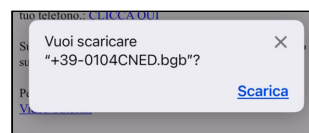
- 3 Open: tap the entrance button when you're near the device.

BGates Business · Business plan: from invitation to opening

- 1 You receive the invitation. When the manager authorises your number, you get a message with your personal invitation link.
- 2 Open the link on your phone: the invitation page walks you through three steps.
- 3 Install the free BGates Business app from the App Store or Google Play.
- 4 Download the invitation file by tapping 'Click here to download the invitation file' and confirm with 'Download'.
- 5 Open the downloaded file: the invitation is added to the BGates Business app, which opens showing the button for your entrance.
- 6 Get close and open. The button only becomes active when you're within range of the device (10–20 metres).



- 1 The invitation message.



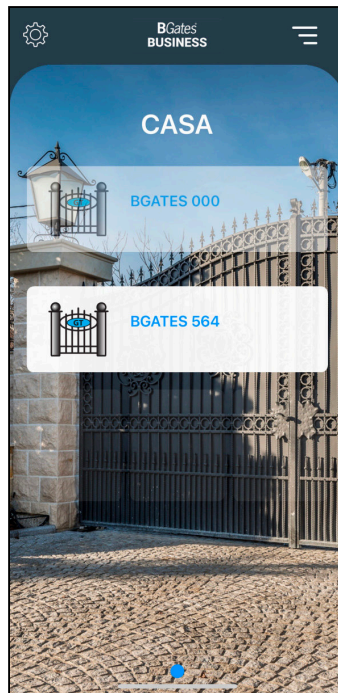
- 4 Download the invitation file.



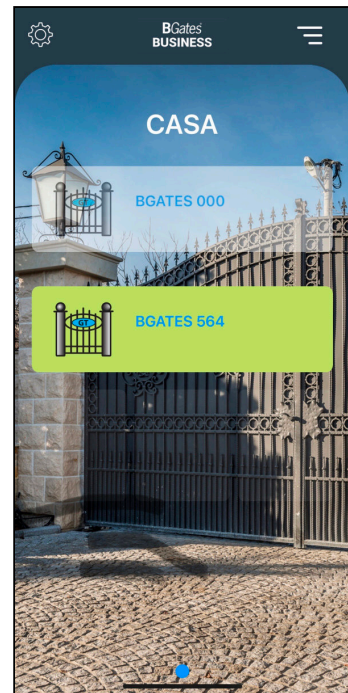
- 2 The invitation page with the three steps.



6 Out of range: the entrance button is greyed out.



6 In range: the button becomes active.



6 Open: tap the button; it turns green and the entrance opens.

The invitation file is personal: it only works for your number and the entrances you are authorised to use. If you get a new phone, ask the manager to resend the invitation (Dashboard → ⋮ → Re-invite).

(*) Chargeable services, billed per use or per user.

PART B

B

With your own SIM: SMS commands

You need a voice SIM with VoLTE enabled. BGates works stand-alone: you open it by calling the SIM's number and program it by SMS from any phone. At installation, all you need to do is change the password (Getting started, B3): out of the box, the device already opens for any caller. Mobile data is not required; it is only needed for firmware updates by SMS (B11).

B1 Preparing the SIM

- Standard-size voice SIM with VoLTE enabled (check with your network operator).
- Mobile data is not needed to open or program the device, only to update the firmware by SMS (B11). A few MB a year is plenty.
- Put the SIM in a phone first to remove the PIN request and turn off voicemail and call waiting.
- Insert it as shown under Installation (steps 1–4), then power up.
- Your caller ID must not be withheld. If it is, dial *31# before the device's number (e.g. *31#3471234567). For landlines or switchboards (PBXs) that withhold their number, contact your provider or change the switchboard settings.
- Call the SIM's number: out of the box (Smart Start ON), the device opens for any caller. Calls are always free: the device does not answer, it identifies the caller and triggers the relay.
- Program it by SMS, or via Bluetooth with GT Manager (*) or the BGates GT app (*): the commands are the same.

B2 Command syntax

Each command is a single SMS made up of fields separated by commas, with no spaces: password, COMMAND, value. Configuration commands start with E (e.g. 1234, E, PING); command names are not case-sensitive. The device always replies in English.

The password has four characters, letters or digits (factory default 0000), and is not case-sensitive either: AB12 and ab12 are the same password. With your own SIM you must change it immediately: while it is still 0000, the only SMS command the device accepts is the password change (B3, step 1). A command with the wrong password is ignored, without a reply. After 3 wrong attempts from the same number, the device ignores that number for 30 seconds, doubling the lockout with each further error up to a maximum of 30 minutes. Other numbers are not affected.

B3 Getting started

At installation there is just one mandatory step: change the password. Then check the device status. Out of the box, BGates opens for any caller; to restrict it to specific numbers, see B4. From step 2 onwards, replace 'password' with your new password.

NO.	FUNCTION	SMS TO SEND	NOTES
1	1 · Change the password mandatory	0000, P, new e.g. 0000, P, 4821	You must change the password. While the password is still 0000, the device replies to any other SMS command with 'Default password: set a new one with 0000,P,<4 characters>'. Four characters, letters or digits (not case-sensitive). Reply: 'Your password has been changed'. Keep it somewhere safe. Calls will open even before you change it.
2	2 · Device status	password, E, PING e.g. 4821, E, PING	Replies with the firmware version, signal strength and settings (see B10). To update to the latest firmware, see B11.
3	Open by SMS	password, PULSE, seconds e.g. 1234, PULSE, 2	Energises the relay immediately for the specified number of seconds (1–60), from any phone, without changing the mode. A confirmation SMS is sent back. In thermostat mode it won't open: 'PULSE: not allowed in thermostat mode'.

NO.	FUNCTION	SMS TO SEND	NOTES
4	Open by SMS without a password	Open	Triggers the relay in both pulse and bistable mode. With Smart Start OFF it only works from authorised numbers.

B4 Authorised numbers

Out of the box, BGates opens for any caller (Smart Start ON): anyone who calls the SIM's number can open, with no numbers stored. To restrict access to **authorised numbers only**:

- first add the numbers (I or MI, below);
- then switch Smart Start off with password, E, SMART=OFF. In that order: with Smart Start OFF and an empty phonebook, nobody can open.

Always enter numbers in **international format**, including domestic ones: +39... or 0039... for Italy, +44... or 0044... for the UK, and so on. This applies to every command that contains a number. To let a number open only on certain days, at certain times or within a set period, see B6.

NO.	FUNCTION	SMS TO SEND	NOTES
5	Smart Start OFF	password, E, SMART=OFF e.g. 1234, E, SMART=OFF	Only authorised numbers can open. Send this after adding the numbers.
6	Smart Start ON (default)	password, E, SMART=ON e.g. 1234, E, SMART=ON	Opens for any caller: no programming needed. Factory default.
7	Authorise a number	password, I, number e.g. 1234, I, +393471234567	Reply: '00393471234567 successfully inserted'. The device stores the + as 00. Landline numbers can be authorised too (e.g. +390612345678).
8	Authorise several numbers in one SMS up to 9 numbers at a time	password, MI, num1, num2, num3 e.g. 1234, MI, +393471234567, +393481234567	Reply: 'Multiple insert results (NEW/ALREADY PRESENT) (n / m)', i.e. how many numbers were new and how many were already stored.
9	Delete a number	password, D, number e.g. 1234, D, +393471234567	Reply: '+393471234567 successfully removed'.
10	Check a number	password, C, number e.g. 1234, C, +393471234567	'... found in phonebook' if authorised (with days, times and dates), '... not found in phonebook' if not.
11	Count stored numbers	password, E, DIR e.g. 1234, E, DIR	Reply: 'Total active numbers: 12'.
12	List stored numbers	password, E, LIST, page e.g. 1234, E, LIST, 2	One SMS per page, 9 numbers per page: 'Page 2/3 (23): 00393471234567 ...'. If you leave out the page number, you get page 1.
13	Delete all numbers	password, E, DELETE	Warning: deletes all stored numbers. Settings are kept.
14	Add/delete confirmations	password, E, A1 · password, E, A0	A1 (default): a reply SMS for each number added or deleted (I, MI and D commands). A0: no reply.

B5 Relay modes

NO.	FUNCTION	SMS TO SEND	NOTES
15	Pulse (momentary) mode (default)	password, E, M, 1	When called, the relay energises for the set time (2 s by default) and then releases. For gates and doors.

NO.	FUNCTION	SMS TO SEND	NOTES
16	Pulse duration	<code>password,E,PS,seconds</code> (1–30, default 2) <code>password,E,PSS,tenths</code> e.g. 1234,E,PS,5	PS sets it in seconds; PSS in tenths of a second, for gate operators that need a more precise pulse.
17	Open now	<code>password,PULSE,seconds</code> (1–60) e.g. 1234,PULSE,5	Energises the relay immediately for the specified number of seconds, as an alternative to calling, without changing the mode. A confirmation SMS is sent back. Does not work in thermostat mode.
18	Bistable (latching) mode	<code>password,E,M,2</code>	Each call toggles the relay on or off, and it stays in that state until the next command. For lights, electric locks and boilers.
19	On / off	<code>password,BS,ON</code> · <code>password,BS,OFF</code> e.g. 1234,BS,ON	BS,ON switches the device to bistable mode and turns the relay on ('AI ON'). BS,OFF turns the relay off, also stopping a running timer early; the device stays in bistable or timer mode ('AI OFF' / 'Timer OFF').
20	Relay status	<code>password,BS,CHECK</code> e.g. 1234,BS,CHECK	Replies with the status: 'AI ON', 'AI OFF', 'AI in pulse mode', 'Timer ON' with the minutes remaining, or the thermostat status.
21	Timer: on for N minutes	<code>password,BS,minutes</code> (1–1440) e.g. 1234,BS,30	'Timer ON': switches off automatically when the time is up; BS,OFF stops it early ('Timer OFF').
22	Default timer duration	<code>password,E,TIMER,minutes</code> (1–1440) e.g. 1234,E,TIMER,120	Switches the device to timer mode with this duration (max. 24 hours): the timer starts on the next call. 0 = back to pulse mode.
23	Bistable response delay	<code>password,E,DS,seconds</code> (0–30, default 10) e.g. 1234,E,DS,10	How long the device waits before acting on a bistable call. To check the status without changing it, call and hang up before this time is up: you'll get 'AI ON' or 'AI OFF'.
24	Pause after a call	<code>password,E,DC,seconds</code> (0–30, default 0) e.g. 1234,E,DC,10	After handling a call, the device ignores further calls for this many seconds. This prevents double triggering when someone calls straight back. 0 = no pause.
25	SMS after a pulse	<code>password,E,B1</code> · <code>password,E,B0</code>	B1: sends 'AI pulse' on every opening. B0 (default): no SMS.
26	Feedback after a bistable command	<code>password,E,C1</code> · <code>C2</code> · <code>C0</code>	C1 (default): status SMS 'AI ON' / 'AI OFF'. C2: the device rings you back if the relay is on. C0: no feedback.

B6 Time slots and dates

Time slots have two uses: letting a number open only on certain days, at certain times or within a set period, or holding the gate open at certain times of day. Either way, the device must have the correct time. If you use neither time slots nor dates, the time doesn't matter.

First, check the time

The device normally takes the time from the mobile network as soon as it registers. Check it before setting time slots or dates; if it is missing or wrong, see B11. Without a valid time, so that nobody gets locked out, every number in the phonebook can open at any time, even after its expiry date.

NO.	FUNCTION	SMS TO SEND	NOTES
27	Check the time	<code>password,E,RTC</code> e.g. 1234,E,RTC	Reply: 'BGates time: 14:05:33 26/10/20' means 14:05:33 on 20 October 2026: the date is in year/month/day order. If it is wrong, see B11.

Restricting numbers to certain days, times or dates

A number can be valid at all times, or only on certain days, at certain times and within a given period:

number; days; slot1; slot2; dates. Days = the digits of the permitted days, 1 = Monday ... 7 = Sunday (e.g. 12345 = Monday to Friday, 67 = Saturday and Sunday). Slots = up to two, in whole hours, each written as start hour and end hour separated by a hyphen; the end hour is exclusive: 8-12 means 8:00 to 12:00, 0-24 means all day. Dates = a single date (dd/mm/yy) is the expiry date: valid from now up to and including that day; a date followed by a hyphen (dd/mm/yy-) is a start date: valid from that day with no expiry; two dates joined by a hyphen (dd/mm/yy-dd/mm/yy) define a period, both dates inclusive. With no dates, the number never expires. All fields after the number are optional. With Smart Start ON the device opens for everyone regardless: restrictions only apply with Smart Start OFF (B4).

NO.	FUNCTION	SMS TO SEND	NOTES
28	Authorise with days, times and dates	password, I, number; days; slot1; slot2; dates e.g. 1234, I, +393478957930; 12345; 8-10; 31/10/26 e.g. 1234, I, +393478957930; 12345; 8-10; 01/11/26- e.g. 1234, I, +393471234567; 12345; 8-12; 14-18; 01/10/26-31/12/26	Monday to Friday during the given slots (8-10 = 8:00 to 10:00), and: • valid from now up to and including 31/10; • valid from 1/11 with no expiry; • valid from 1/10 to 31/12 inclusive. With no dates, the number never expires. Fields are separated by ';', and the two dates of a period by a hyphen.

Holding the gate open during a time slot

During the slot the relay stays energised (gate held open); outside it, the device reverts to pulse mode. Up to two slots per day, in whole hours; the end hour is exclusive (8-18 means 8:00 to 18:00). Not available in thermostat mode.

NO.	FUNCTION	SMS TO SEND	NOTES
29	Read the time slots	password, E, SCHED	'SCHED:ON 1=8-12,14-18 2=8-18 3=- ...' (1 = Monday ... 7 = Sunday, '-' = no slot)
30	Set the time slots	password, E, SCHED, days; slot1; slot2 e.g. 1234, E, SCHED, 12345; 8-12; 14-18	Days as digits (1 = Monday ... 7 = Sunday): in this example Monday to Friday, 8-12 and 14-18. Up to two slots, separated by ';'; other days are left unchanged. Reply: 'SCHED: 12345 set'.
31	Days without slots	password, E, SCHED, days; OFF e.g. 1234, E, SCHED, 67; OFF	Clears the slots on the given days: here Saturday and Sunday. Reply: 'SCHED: 67 closed'.
32	Enable / disable scheduling	password, E, SCHED, ON · OFF	The slots are kept in memory while scheduling is disabled.
33	Schedule override number	password, NTF5, INS, number e.g. 1234, NTF5, INS, +393471234567	A call from this number during a slot closes the gate until the slot ends; BS, ON opens it again. To open outside the slot, the number must also be authorised with I. NTF5, CHECK shows the number; NTF5, DEL removes it.

B7 Thermostat

Using its built-in temperature sensor, BGates can control a boiler or an air-conditioning unit. **Winter** (heating, default): the relay switches on below the set temperature and off above it. **Summer** (cooling): the relay switches on above the set temperature and off below it. Select the mode with E, THM. Frost protection always switches the relay on below its threshold. In thermostat mode the relay is controlled by temperature alone: opening commands have no effect.

NO.	FUNCTION	SMS TO SEND	NOTES
34	Set temperature	password, E, TH, degrees e.g. 1234, E, TH, 21	Whole degrees only.

NO.	FUNCTION	SMS TO SEND	NOTES
35	Winter / summer	<code>password,E,THM,0</code> <code>password,E,THM,1</code> e.g. 1234,E,THM,1	0 = winter (heating, default); 1 = summer (cooling): e.g. with a set temperature of 26 °C, the air conditioning switches on above 26 °C. Frost protection works the same in both modes. Only relevant in thermostat mode (BS,THON): it has no effect in pulse or bistable mode.
36	Frost protection	<code>password,E,AZ,degrees</code> (0 = off)	Below this temperature the relay always switches on.
37	Thermostat on	<code>password,BS,THON</code>	'Thermostat active (set:21C) live: 19.5C'
38	Thermostat off	<code>password,BS,OFF</code>	'Thermostat inactive ...'. Only frost protection stays active.
39	Thermostat status	<code>password,BS,CHECK</code>	'Thermostat active (set:21C) af:5C live: 19.5C Relay:ON'
40	Temperature reading	<code>password,E,TEMP</code>	'Temperature: 19.5 C (chip 24.0 C)'

B8 Notifications and SMS forwarding

BGates can send SMS alerts to up to 5 numbers for each notification type. NTF1: forwards unrecognised SMS (e.g. messages from the network operator). NTF2: statistics (openings, restarts, SMS). NTF3: every relay activation. NTF4: low signal.

NO.	FUNCTION	SMS TO SEND	NOTES
41	Add numbers to a notification	<code>password,NTFn,INS,num1,num2</code> e.g. 1234,NTF3,INS,+393471234567	n = 1...4, up to 5 numbers per notification. With NTF3, each relay activation sends 'Pulse phonenumber'.
42	Who receives a notification	<code>password,NTFn,CHECK</code> e.g. 1234,NTF1,CHECK	Lists the numbers for that notification type.
43	Remove all numbers	<code>password,NTFn,DEL</code> e.g. 1234,NTF1,DEL	Removes every number from that notification.
44	Low signal threshold	<code>password,NTF4,TRIGGER,level</code> (0–31, default 5) e.g. 1234,NTF4,TRIGGER,22	Below this level, the NTF4 alert is sent, e.g. 'GSM quality signal < 20 (22)'.
45	Send statistics now	<code>password,NTF2,SEND</code> e.g. 1234,NTF2,SEND	Sends 'Open:12 Output:0 Restart:1 SMS received:40 sent:38' to the NTF2 numbers.
46	Reset the counters	<code>password,NTF2,RESET</code> e.g. 1234,NTF2,RESET	Resets the NTF2 statistics counters.
47	Send an SMS from BGates	<code>password,FWD,number,text</code> e.g. 1234,FWD,+393471234567,Test	BGates sends the text to the specified number from its own SIM.

B9 Auxiliary input and output (*), on request

The digital input and open-collector output are enabled on request. For instructions, contact support (info@bgates.it) quoting the device's serial number.

NO.	FUNCTION	SMS TO SEND	NOTES
48	Open-collector output	<code>password,E,OC,1</code> · <code>password,E,OC,0</code>	'OC: ON' / 'OC: OFF'
49	Digital input	<code>password,E,RI</code>	'Input: ON' / 'Input: OFF'

B10 Status and diagnostics

NO.	FUNCTION	SMS TO SEND	NOTES
50	Full status	<code>password,E,PING</code>	'BGates AI, 2.3.209, Signal:21(Excellent), Smart:ON, Relay:OFF, Dir:12, A3, A1, M:1, B0, C1, PS:2.0, DS:10, DC:0, Timer:0, ArB:0, TH:18C, AF:5C, MD:W'. The second field is the firmware version . Signal 0–31: Low <10, Ok 10–14, Good 15–20, Excellent >20. M: 1 pulse, 2 bistable, 3 timer, 4 thermostat.
51	Device time	<code>password,E,RTC</code>	'BGates time: 14:05:33 26/10/20': the date is in year/month/day order. Where the time comes from and how to correct it: see B11.
52	Command confirmation	<code>password,E,A3</code> · <code>password,E,A2</code>	A3 (default with your own SIM): sends 'Command accepted' for every accepted command. A2: replies only to commands that return information (default with the BGates SIM).
53	Restart	<code>password,E,REBOOT</code>	Restarts the device; settings are kept.
54	Automatic restart	<code>password,E,AREBOOT,hours</code> (1–719, 0 = never)	Restarts the device every N hours; useful where network coverage is patchy.

B11 Firmware updates and clock · for installers

With the BGates SIM (Part A) everything is already configured and updates are delivered from the dashboard. With your own SIM, the device works without mobile data or an APN: the APN and **mobile data** are only needed to **update the firmware** by SMS and, as a fallback, to get the time from the Internet when the mobile network doesn't provide it.

Updating the firmware with your own SIM

You trigger the update yourself by SMS: the device connects to the BGates server for a few minutes, downloads the new version (about 200 KB of data), restarts and texts you back. The SIM needs **mobile data** and the operator's APN, which only has to be set once. The firmware is digitally signed: the device only installs genuine BGates files, and if anything goes wrong it restarts with the previous version.

NO.	FUNCTION	SMS TO SEND	NOTES
55	1 · Set the APN once only	password,E,APNSET,apn e.g. 1234,E,APNSET,ibox.tim.it password,E,APNSET,apn,user,password e.g. 1234,E,APNSET,ibox.tim.it,login,passwd	The APN is the operator's mobile Internet access point, e.g. in Italy: TIM ibox.tim.it · Vodafone mobile.vodafone.it · WindTre internet.it · Iliad iliad · ho. web.ho-mobile.it ; elsewhere, ask your operator. If the operator also requires a username and password (typically business APNs), add them after the APN in the same SMS: up to 16 characters each, without quotation marks; for a password only, leave the username blank (E,APNSET,apn,,password). Sending E,APNSET without a username and password clears them. Reply: 'APN ibox.tim.it saved, no login. Internet time sync in progress: check with E,RTC in 2 minutes' (with username and password: '... saved, login set. ...'); the password is never shown in replies. The device then restarts its modem and won't respond for about a minute. If the APN is wrong, it reconnects to the network by itself and can still be reached by SMS.
56	2 · Update the firmware	password,E,FTPCHECK e.g. 1234,E,FTPCHECK	Immediate reply: 'Update: connecting to server'. If a new version is available, the device restarts after a few minutes (off the network for about a minute) and sends 'Updated to 2.3.xxx'. If it is already up to date: 'Update: firmware already up to date (2.3.xxx)'.

IF THE REPLY IS...	WHAT IT MEANS AND WHAT TO DO
Update failed, firmware 2.3.xxx	The previous version is still installed and the device works normally. Try again later.
Update: APN not set (E,APNSET,<apn>)	The APN is missing: set it (step 1 above) and try again.
Update: data connection not available	Wrong APN, missing or incorrect APN username/password, or mobile data not active on the SIM.
Update: no response from server (...) Update: server not available	The server did not respond: try again later.
Update: connection refused by server	The server does not recognise the device: contact support quoting the serial number.

The device clock

The time only matters if you use time slots or dates (B6). The device takes it **from the mobile network** as soon as it registers. However, not every operator provides it, or provides it reliably: if E, RTC returns the wrong time, there are two fallbacks.

- **From the Internet**, if the SIM has mobile data: set the APN (above). The device queries an NTP server straight after E, APNSET, then automatically whenever the time has been missing for 15 minutes (retrying after 6 hours if needed).
- **Manually**, if the SIM has no mobile data: E, RTC, YYMMDDhhmm (below).

Without a valid time, restrictions are not applied: so that nobody gets locked out, every number in the phonebook can open at any time, even after its expiry date.

NO.	FUNCTION	SMS TO SEND	NOTES
57	Read the time	password,E,RTC	'BGates time: 14:05:33 26/10/20' = 14:05:33 on 20/10/2026 (year/month/day).

NO.	FUNCTION	SMS TO SEND	NOTES
58	Sync the time from the Internet now	<code>password,E,NTP</code>	Requires the APN and mobile data. Check with <code>E,RTC</code> after 2 minutes.
59	Time zone	<code>password,E,TOS,A</code> · <code>password,E,TOS,0 ... 3</code> <code>password,E,TOS</code>	A (default): time zone and daylight saving time taken from the network. 0–3: fixed time zone, UTC+0 to UTC+3. With no value, it returns the current setting: 'TOS:AUTO,UTC+1,DST:1,...'.
60	Set the time manually	<code>password,E,RTC,YYMMDDhhmm</code> e.g. <code>1234,E,RTC,2610201405</code>	Local time: year, month, day, hours, minutes (here 20/10/2026 at 14:05). A fallback for SIMs without mobile data: if the SIM has data, setting the APN is better, as it keeps the clock in sync automatically.

If the time is still wrong: with mobile data, check the APN, send `password,E,NTP` and check again with `E,RTC` after 2 minutes; without data, set it manually. If it is exactly one hour out, check the time zone with `E,TOS`.

B12 Reply messages

The default replies are in English. Each one can be customised (1 to 60 characters) with `password,E,Tn,new text` (e.g. `1234,E,T1,Light on`).

DEFAULT TEXT	SENT WHEN
T0 · Command accepted	command carried out (with A3)
T1 · AI ON	relay on
T2 · AI OFF	relay off
T3 · found in phonebook	number found (C)
T4 · not found in phonebook	number not found (C)
T5 · successfully inserted	number added
T6 · successfully removed	number deleted
T7 · Your password has been changed	password changed
T8 · Timer ON	timer started
T9 · Timer OFF	timer stopped
T10 · AI in pulse mode	BS,CHECK in pulse mode
T11 · AI pulse	pulse (with B1)
T12 · number already present	already in the phonebook
T13 · Memory error	phonebook full
T14 · Multiple insert results	result of MI
T15 · Total active numbers:	reply to E,DIR

B13 Resetting

NO.	FUNCTION	SMS TO SEND	NOTES
61	Settings reset	password, E, RESET	Restores the default settings (password 0000, Smart Start ON, A3, C1, pulse 2 s). Stored numbers are kept. The password reverts to 0000 and must be changed again (B3, step 1).
62	Factory reset	password, E, FACTORY	Deletes all numbers and restores messages and settings to factory defaults (password 0000), without restarting. Then repeat Getting started (B3) and, if needed, re-enter the numbers (B4).
	Forgotten password · TEST button	—	Factory reset with the TEST button: with the device powered, wait for the LED to flash rapidly, press and hold TEST for 30 seconds, then wait 1 minute. This deletes all numbers and restores the factory defaults (password 0000). Alternatively, contact support (info@bgates.it) quoting the serial number.

(*) Chargeable services, billed per use or per user.

B Command index

Find a command quickly: number, function and page.

1	1 · Change the password	p. 11	32	Enable / disable scheduling	p. 14
2	2 · Device status	p. 11	33	Schedule override number	p. 14
3	Open by SMS	p. 11	34	Set temperature	p. 14
4	Open by SMS without a password	p. 12	35	Winter / summer	p. 15
5	Smart Start OFF	p. 12	36	Frost protection	p. 15
6	Smart Start ON (default)	p. 12	37	Thermostat on	p. 15
7	Authorise a number	p. 12	38	Thermostat off	p. 15
8	Authorise several numbers in one SMS	p. 12	39	Thermostat status	p. 15
9	Delete a number	p. 12	40	Temperature reading	p. 15
10	Check a number	p. 12	41	Add numbers to a notification	p. 15
11	Count stored numbers	p. 12	42	Who receives a notification	p. 15
12	List stored numbers	p. 12	43	Remove all numbers	p. 15
13	Delete all numbers	p. 12	44	Low signal threshold	p. 15
14	Add/delete confirmations	p. 12	45	Send statistics now	p. 15
15	Pulse (momentary) mode (default)	p. 12	46	Reset the counters	p. 15
16	Pulse duration	p. 13	47	Send an SMS from BGates	p. 15
17	Open now	p. 13	48	Open-collector output	p. 16
18	Bistable (latching) mode	p. 13	49	Digital input	p. 16
19	On / off	p. 13	50	Full status	p. 16
20	Relay status	p. 13	51	Device time	p. 16
21	Timer: on for N minutes	p. 13	52	Command confirmation	p. 16
22	Default timer duration	p. 13	53	Restart	p. 16
23	Bistable response delay	p. 13	54	Automatic restart	p. 16
24	Pause after a call	p. 13	55	1 · Set the APN	p. 17
25	SMS after a pulse	p. 13	56	2 · Update the firmware	p. 17
26	Feedback after a bistable command	p. 13	57	Read the time	p. 17
27	Check the time	p. 13	58	Sync the time from the Internet now	p. 18
28	Authorise with days, times and dates	p. 14	59	Time zone	p. 18
29	Read the time slots	p. 14	60	Set the time manually	p. 18
30	Set the time slots	p. 14	61	Settings reset	p. 19
31	Days without slots	p. 14	62	Factory reset	p. 19

Technical specifications

Power supply	90–240 V AC, 26 mA
Connectivity	4G LTE Cat 1, Bluetooth Low Energy 5.0
Relay	Max. current, capacitive load: 10 A @ 28 V DC, 10 A @ 240 V AC Max. current, inductive load: 5 A @ 28 V DC, 5 A @ 120 V AC
Output contact	Volt-free changeover contact (C / NO / NC)
Extras	Built-in temperature sensor
Phone numbers	Up to 1,000 stored
Dimensions	69 × 88 × 57 mm, 4 DIN modules

Quick links



Web app
app.bgates.it



Dashboard
dashboard.bgates.it



Complete Guide
online version

Contact and warranty

Contact: info@bgates.it · support in Italian and English

Warranty: 2 years (5 years with SIM BGates Business) · full terms at www.bgates.it

Business Gates Srl · www.bgates.it · CE marked



Ed. 10/2026 · Rev. 1.1

(*) Chargeable services, billed per use or per user.