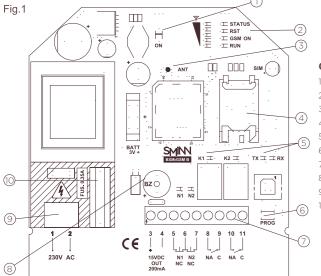
#### **TECHNICAL SPECIFICATIONS**

#### BOX M GSM B

DOX III COIII D		
Relays 2 x 1 amp relays		
User memory	Depends on model	
GSM Module	LTE FDD B1/B3/B7/B8/B20/B28	
	WCDMA B1/B8	
	GSM/EDGE B3/B8	
SMS	Text mode	
SIM	On-board connector	
Power supply	230VAC	
Antenna	1/4-1/8 lambda MMCX included	
Operating temperature	-20°C / +65°C	
Dimensions	182x145x65 mm. Antenna not included	
Sealing	IP54 (IP65 with cable glands)	
Enclosure	ABS	



#### **COMPONENTS**

- 1. Led ON
- 2. Leds RUN / Status / Reset / GSM ON
- 3. Antenna
- 4. SIM card
- 5. Relay / TX RX LEDs
- 6. PROG. button
- 7. Connection strip
- -
- 8. Buzzer
- 9. 230VAC power supply input
- 10. Fuse protection

# INDICATIONS

Declares that

The panel is equipped with visual and acoustic signals to indicate its status.

STATUS	Led STATUS	Led GSM ON	BUZZ
SIM not inserted	ON	OFF	OFF
No MASTER	ON	ON	Beep on start-up
PASWORD 0000	Slow flashing	ON	Beep on start-up
Configured	OFF	ON	Beep on start-up

# **CE DECLARATION OF CONFORMITY**

The company ELSON ELECTRÓNICA, S.A.

Pol. Ind. Torrelarragoiti, P6 · A3 48170 Zamudio - Vizcaya

(SPAIN)

The product **BXM GSMB** receiver

Manufactured by ELSON ELECTRÓNICA, S.A.

Under the trademark SMINN

For use in Residential environments,

Commercial or Light Industry

It complies with the relevant provisions of the following directives:

Directive 2014/35/EU Low Voltage

Directive 2014/30/EU Electromagnetic compatibility

Directive 2014/53/EU Radio equipment

Directive 2011/65/EU RoHs

Directive 2012/19/EU WEEE

Zamudio on 2022-20-07



José Miguel Blanco Pérez Technical Director



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#### LIMITATION OF THE USE OF RECEIVERS

Use in applications other than those specified is not warranted.

THE INSTRUCTIONS FOR USE OF THIS EQUIPMENT MUST BE GIVEN TO THE USER WHO WILL ALWAYS HAVE THEM IN HIS POSSESSION. IN CASE OF LOSS, THE USER MAY REQUEST A COPY OR DOWNLOAD THEM DIRECTLY FROM THE WEBSITE WWW.SMINN.COM.

The manufacturer reserves the right to change equipment specifications and this manual without prior notice. The equipment may only be operated by trained and/or properly instructed personnel.

#### WARRANTY

This product has been subjected during its manufacturing process to a complete TEST that guarantees its reliability and proper functioning.

The manufacturer grants the product a warranty of 36 months from the date printed on the product and against any anomaly that the product may present in its appearance or functionality.

Excluded from this warranty are damages caused by third parties, natural causes (flood, fire, lightning, etc.), improper handling or installation, vandalism and in general any cause not attributable to the manufacturer.

The scope of the guarantee is limited to the repair or replacement of the damaged element. Excluded from the guarantee are the expenses that could be derived from assembly, travel, transport, parts subject to wear and tear, etc. and in general any expenses that are not for the repair or replacement of the damaged element of the equipment. The installer/distributor must request from the manufacturer an RMA number or authorisation to send the equipment under warranty. Without this prerequisite, the manufacturer will not be able to process or honour the warranty.

#### WARNING

The product must be used for its intended purpose and any other use is considered inappropriate. Packaging and containers must NOT be disposed of in the environment. Keep products, packaging, containers, documentation, etc. out of the reach of children. Observe the local, national or European regulations in force.

The information contained in this document may contain errors which will be corrected in subsequent editions. The manufacturer reserves the right to modify the contents of this document or the product without prior notice.

#### WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

In accordance with the European Directive 2002/96/EC on waste electrical and electronic equipment (WEEE), the presence of the symbol (see symbol at the end of this text) on the product or on the packaging indicates that this item must not be disposed of in the unsorted municipal waste stream. It is the responsibility of the user to dispose of this product by taking it to a designated collection point for the recycling of waste electrical and electronic equipment. Separate collection of this waste helps to optimise the recovery and recycling of any recyclable material and also reduces the impact on health and the environment.

For more information about the correct disposal of this product please contact the local authority or the distributor where you purchased this product.

#### INSTALLATION

The SMINN receiver panel is prepared to be easily fixed to the wall using the plugs and screws supplied.

Before connecting or manipulating the equipment, the power switch or differential must be disconnected. The installation shall be carried out by specialised and/or suitably instructed personnel, using cable of sufficient section and properly protected, taking into account that the equipment permanently connected to the grid must have an easily accessible disconnection device (e.g.: a circuit breaker).

Attention shall be paid to the wiring following the indications on the printed circuit board silkscreen.

After programming and checking the equipment, fit the cover onto the front of the enclosure using the screws supplied.

REINFORCED CONCRETE AND METAL PARTS OR OTHER RECEIVING EQUIPMENT ATTENUATE THE RF SIGNAL TO A LARGE EXTENT, THEREFORE, INSTALLATION NEAR THESE ELEMENTS SHALL BE AVOIDED AS EAR AS POSSIBLE

# **ERROR CODES**

If an error occurs while processing a message, the equipment shall respond with a code from the following table:

CODE	MEANING
1	Device is full
2	Invalid relay action
3	Incorrect password
4	Invalid phone number format
5	Invalid input mode
6	Invalid user type
7	Master user cannot be deleted
8	User does not exist
9	Master user cannot be locked
10	Invalid password format
11	Master user cannot be replaced
12	Invalid push-button mode
13	Phone entered is not the master
14	Invalid TON
15	Invalid TOFF
16	Invalid TRSTR
17	SMS is missing
18	User already exists
19	User does not have the appropriate permissions to perform operation

# BOX M GSM B GSM 2G/3G/4G RECEIVER BOX



# **DESCRIPTION**

The SMINN GSM B receiver box is developed with state-of-theart electronic devices. It incorporates a quad-band receiver with the capacity to store between 100 and 2000 users.

Its capacity for storage via GSM, USB or using a simple push button makes it simple and convenient.

They are designed to provide the order of activation / deactivation of home automation and control equipment in a simple way such as:

Alarm, security and surveillance systems. Lights, blinds, awnings, doors and accesses.

The equipment has been built using high quality materials and components and the latest technology. Equipment that complies with current standards for use in residential, commercial and light industrial installations.



#### IN ORDER FOR THE SYSTEM TO WORK, THE PIN REQUEST OF THE SIM CARD TO BE PLACED IN THE GSM DEVICE MUST BE DEACTIVATED.

#### **INITIAL CONFIGURATION**

The SMINN GSM B device can be operated in different configurable modes.

It is advisable to configure the device via SMS or via USB using the GSMTool application, if available. If GSMTool is to be used, do not connect the SIM card and power it directly using the USB socket.

It is advisable to start by registering the first user (See USER MANAGEMENT), who will be, until further notice, the master user of the device. It is recommended to change the device administration password (default 0000). If no user is registered, the system will operate in public mode, i.e. it will grant access to any call to its number through

#### **OPERATING MODES**

The equipment can operate in one of three modes:

- Dual-channel: This mode activates the relay configured for each user when a call is received. For use in two-device installations or two independent modes. X and Z are the times configured for the relay signals.
- Abre / Cierra: This mode uses relay K2 to open the door on an opening call and relay K1 to close the door on the next call. It is possible to set a safety time to close the door automatically; if not set, the door must be

X is the time set for the opening signal on relay K2, Y is the safety time set to close the door automatically and Z is the time set for the closing signal on relay K1. If Y is set to 0 the door will only close when requested by

• Automatic Cycle: This mode uses the relay assigned to the user to open the door on an opening call and waits for a set time before giving a closing pulse on the same relay. It is possible to end the wait prematurely with a call. If the timeout is set to zero the door will only close by a call.

X is the time set for the open signal, Y is the time set for the automatic closing of the door and Z is the time set for the close signal. If Y is set to O the door will only close when requested by the user.

#### **DIGITAL INPUTS**

The SMINN GSM B receiver has two configurable digital inputs for alarms. Each of them can be configured independently, considering the following parameters:

- Contact type: Normally open / normally closed contact
- On time: Time that the input must be active to consider that an alarm occurs.
- · Off time: Time that the input must be inactive before the alarm is considered to stop occurring.
- Rehabilitation time: Time interval during which the input is ignored after the end of an alarm.

Alarms produce SMS messages for all subscribed users, and the texts sent for each entry can be customized independently

#### **USER MANAGEMENT**

The first user that is logged in (via USB or PROG button) is considered to be the master user, although this can be changed at a later time. The master user can use all existing configuration messages. In addition to the master user, as many users as desired can be named as administrator users.

You can register via call by pressing the PROG button, SMS or by using GSMTool.

Each user of the system consists of the following information:

- Phone number: The system supports up to 15 digits with international prefix (E.164 ITU-T recommendation).
- Access relay: Relay to be used for the user.
- Schedule: Hours of the day when the system will grant access to the user.
- Limit of uses: Number of accesses that the device will grant to the user.
- Administrator: Sets whether the user has administrator user permissions.
- Enabled: Sets whether the user can be granted access.
- Enabled inputs: Sets from which inputs you will receive alarms.

Administrator users can use most of the configuration messages and can therefore manage the use of the device.

# ACCESS EVENTS

The SMINN GSM B receiver has a rotating memory for storing up to 8000 access events. These events can be read via the USB port and the GSMTool application. For the correct operation of the event system, the equipment must be configured with the correct date and time (see MESSAGE GUIDE) and a button cell battery must be installed to keep the time in case of power failure. The battery must be installed with the equipment switched on and in

### **MESSAGES GUIDE**

Configuration messages are only valid for administrator users and the master user. All comma-separated parameters can be omitted either selectively (leaving the parameter empty but respecting the commas) or starting from a specific parameter (ending the message instead of continuing with the parameter list). Telephone numbers must be written with numbers only and the '+' character for the international prefix, if

Ex.: #0000#NEWU#+3495789056#B,2@ Untyped parameters will take their default value.

#0000#NEWU#+3495789056#B,2,,,0,23@ → UM and USES will take their default values.

# Inputs status

Returns an SMS indicating whether the alarms are activated or deactivated and the status of the relays.

# #STATUS@

#### PROG button lock

# #PASSWD#PRGEN#MODE@

Ex.: #0000#PRGEN#ON@

MODE: ON to enable registration by key. OFF to disable it.

#### User registration/modification

The system will only notify in case of error.

#PASSWD#NEWU#NUM#IN,RL,UM,USES,START,END@ Ex.: #0000#NEWU#+34957489056#B,2,U,255,0,23@ PASSWD 4 character administrator password.

NUM User's phone number. Maximum 15 digits with international code.

> 1 to subscribe to the first digital input alarm. 2 to subscribe to the second digital input alarm.

> > B to subscribe to both inputs alarm.

N if not subscribed to any alarm. Default value.

1 to assign relay K1 to the user

2 to assign relay K2 to the user. Default value.

U if it is an ordinary user. Default value, M if the user is an administrator.

User access limit; Between 1 and 254, 255 means unlimited number of accesses. USES

Default value: 255.

START Start time of the access time slot. Between 0 and 23. Default value: 0. End time of the access time slot. Between 1 and 24 (greater or equal to START). END

Default value: 24.

#### User replacement

IN

RL

UM

Change the phone number of a user (except the master) while keeping its configuration.

#PASSWD#REPL#OLDNUM#NEWNUM@ Ex.: #0000#RFPI #957894056#917344557@.

OLDNUM Existing user's telephone number.

NEWNUM New user's phone number. This cannot be an existing number

#### User removal

It is not possible to remove the master user.

#PASSWD#DELU#NUM@

Ex.: #0000#DELU#957849056@

A locked user is still registered but will not be able to call to activate the relay, use SMS to configure the equipment or receive alarms. It is not possible to lock the master user

#PASSWD#BLCK#NUM@

Fx: #0000#BI CK#957489056@

#### User unlocking

#PASSWD#UBLK#NUM@

Ex.: #0000#UBLK#957849056@

# **Password change**

Change of administration password, used for SMS and communication with GSMTOOL.

 ${\tt\#PASSWD\#MODP\#NEWPASSWD@}$ 

Ex.:#0000#MODP#1234@

NEWPASSWD New 4-character password.

#### Master change

Change the master phone number of the device. The new number must have been previously registered. After the change, the old master user becomes a normal user

#PASSWD#NEWM#OLDNUM#NEWNUM@

Ex.: #0000#NFWM#957894056#917434557@

Phone number of the current master user. OLDNUM NEWNUM Phone number of the new master user.

# **Memory formatting**

#PASSWD#FORMAT#ID\_MEM@

Fx::#0000#F0RMAT#I@

IDMEM U to format user memory, including master, and configuration

L to format the event memory B to format both memories.

## Work mode configuration

#PASSWD#MODE#M,T1,T2,T3@ Ex.:#0000#MODE#C-AUT.3.30.2@

2-CNL for dual-channel. Default value

C-AUT for automatic cycle. OP-CL for open-close.

T1 Activation time in seconds of the relay (X). See modes. Between 1 and 255.

T2 Time in seconds of opening pulse for the relay (Z) or time delay (Y), depending on mode.

Between 0 and 255

Т3 Time in seconds of the closing pulse for the associated relay (Z). This time shall not be

configured for dual-channel mode. Between 1 and 255. Default times: 2 seconds for X

and 7 10 seconds for Y

#### Input configuration

TON

#PASSWD#PLRTY#IN#MODE,TON,TOFF,TRSTR,BASE@

Fx:: #0000#PI RTY#IN2#NC.70.200.5.0@

IN1 to configure the first digital input.

IN2 to configure the second digital input. MODE OFF to disable the digital input. Default value.

NC for normally closed contact with SMS.

NO for normally open contact with SMS.

NC-C for normally closed contact with missed call.

NO-C for normally open contact with missed call. Time that the input must be active to consider that an alarm has occurred.

Between 10 and 990. Default value: 150.

TOFF Time that the input must be inactive to consider that the alarm is no longer occurring.

Between 10 and 990. Default value: 150.

TRSTR Time interval during which the input is ignored after the end of an alarm.

Between 1 and 99. Default value: 5 minutes.

BASE Time base for TON and TOFF. 0 for milliseconds, 1 for seconds and 2 for

minutes. Default value: 0.

# Text configuration for alarms

#PASSWD#CNFG#SMSIN#TEXT@

Ex.:#0000#CNFG#SMS IN-1#FIRE ALARM IN SAN ANTONIO NEIGHBOURHOOD@

SMS IN-1 for the first digital input.

SMS IN-2 for the second digital input

TEXT Text to be sent to subscribed users. Max 120 characters.

# Date configuration

Updates the date of the equipment for use when saving events and checking access according to schedule.

#### #PASSWD#UPDATE#Y,M,D,H,MN,S@

Ex.: #0000#UPDATE#03,1,14,17,53,28@ (14 de Enero del 2013, 17:53:28)

Year of the date in 2 or 4 digits Μ Month of the date (Between 1 and 12). Day of the date (Between 1 and 31). Н Hour of the date (Between 0 and 23). MN Minute of the date (Between 0 and 59) Second of the date (Between 0 and 59).

# Second of the date (Between 0 and 59).

#RL#STS#TIME@

Ex.: #RL1#ON#5@ / #IN1#OFF@

RL RL1 for relay 1, RL2 for relay 2. STS ON to switch the element on.

OFF to turn it off.

TIME Time in seconds. If not indicated, the one configured in the mode is used.

#### **Configure APN**

Set the name of the access point that the device will use to connect to the 4G network. The phone operator

will tell you which APN, username and password to use if necessary #PASSWD#APN#APNDATA@

Ex.: #0000#APN#company.name.com@ Access point name.

APNDATA Access point name

Sets the user name to use for APN authentication.

#PASSWD#APNU#APNUSER@ Ex.: #0000#APNU#username@

APNUSER User name to use for authentication

# **Configure APN password**

Sets the password to use for APN authentication.

#PASSWD#APNP#APNPASSWD@ Ex.: #0000#APNP#password1234@

APNPASSWD Password to use for authentication.

# **Configure APN mode**

Allows you to configure the APN parameters to connect to the network. The device will restart after the SMS.

#PASSWD#APNM#APNMODE,PDP,ATYPE@

Ex.: #0000#APNM#Y.N.B@

APNMODE Y if the device should log in to the network with the configured APNs.

N if APN login is disabled. Default value.

PDP Y to enable the data protocol context N to disable the PDP context. **Default value.** 

N to indicate no authentication. Default value.

P sets authentication according to the PAP protocol. C sets authentication according to CHAP protocol. B sets authentication according to PAP-CHAP protocol.