EPGM1

HARDWIRED ZONE & PGM
OUTPUT EXPANSION MODULE

User manual v1.5

Compatible with:
- ESIM264 v7.09.02 and up.
- ESIM364 all versions.

Main features:
- Hardwired zone expansion adding 16 additional zones per module.
- 2 PGM outputs per module for electrical appliance connection.

EPGM1 is a hardwired zone and PGM output expansion module intended for using with ELDES alarm systems. ESIM264 system supports 1 EPGM1 module, while ESIM364 - 2 EPGM1 modules.
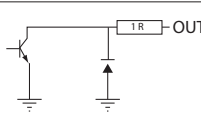
> **NOTE:** For complete information on device operation with ELDES alarm system, please refer to ELDES alarm system installation manual located at www.eldes.lt/download

1. CONTENT OF PACK

2. TECHNICAL SPECIFICATIONS

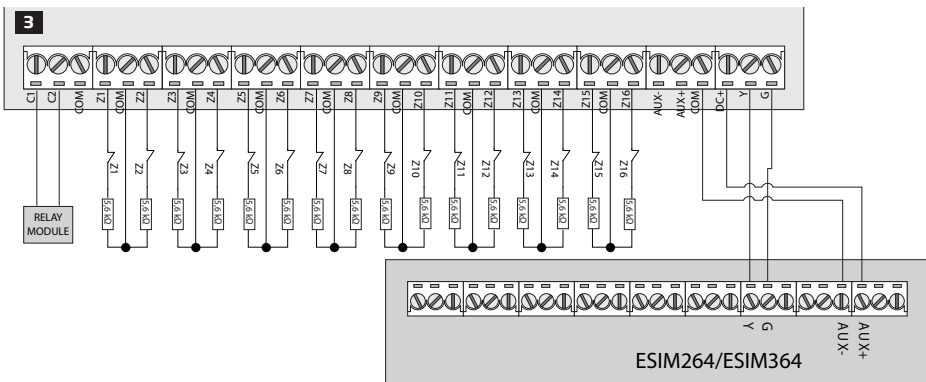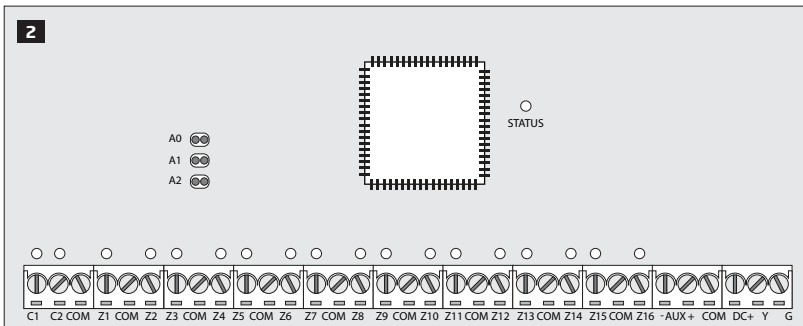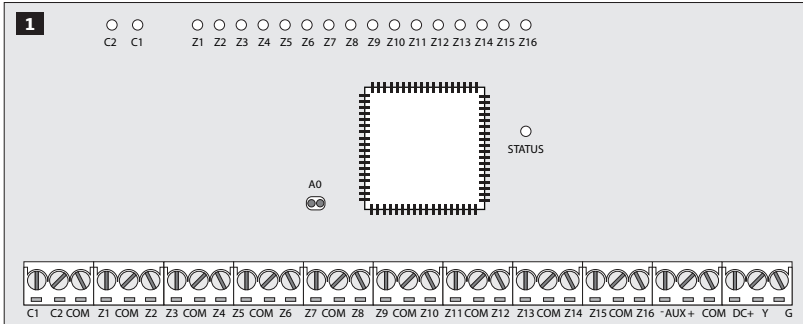## 2.1 Electrical & Mechanical Characteristics

Power supply	10-24V ⎓ 100mA max without auxiliary equipment.
Number of digital inputs	16
Nominal resistance	5,6kΩ
Number of PGM outputs	2
PGM output circuit	1R — OUT Open collector output. Output is pulled to COM when turned on.
Maximum commuting pgm output values	2 x 30V; 250 mA
AUX: auxiliary equipment power supply	13,8V ⎓ 500 mA max
Dimensions	118x47x10mm (4.65x1.85x0.39in)
Range of operating temperatures	-20...+55℃ (-4... +131°F)
Humidity	0-90% RH @ 0... +40℃ (0-90% RH @ +32... +104°F) (non-condensing)

2.2 LED and Pin Functionality

C2, C1	PGM output C1, C2 status - on/off
Z1 - Z16	Zone Z1 - Z16 state - alarm/restore
STATUS	EPGM1 micro-controller status
A0	EPGM1 module address pins
A1	N/A
A2	N/A

2.3 Connector Functionality

C1, C2	PGM output terminals
Z1 - Z16	Security zone terminals
AUX-	Negative power supply terminal for auxiliary equipment
AUX+	Positive power supply terminal for auxiliary equipment
Y	RS485 interface for communication (yellow wire)
G	RS485 interface for communication (green wire)
COM	Common terminal
DC+	Positive power supply terminal

2.4 EPGM1 Address

ESIM364 system allows to connect up to 2 EPGM1 modules - each set under different address. The module address can be set by putting or removing the jumper from the A0 pins implemented in horizontal position (see Fig. No. 1 and 2). Jumper combinations for different EPGM1 module address configuration are indicated in the table below.

Address Configuration

Jumper position	Address
⊙⊙ A0	Module 1
⬤◯ A0	Module 2

3. INSTALLATION

1. Disconnect ESIM264/ESIM364 alarm system main power supply and backup battery.

2. Connect EPGM1 **DC+** terminal to ESIM264/ESIM364 **AUX+** terminal, EPGM1 **COM** terminal to ESIM264/ESIM364 AUX- terminal, EPGM1 **Y** and **G** termianls must be connected to ESIM264/ESIM364 **Y** and **G** terminals respectively (see Fig. No. 2).

3. Connect the resistors and sensors to EPGM1 module according to the selected zone connection **Type 1**, **Type 2** or **Type 3** (see ELDES alarm system installation manual).

4. For ESIM364 users ONLY - if connecting 2 EPGM1 modules, set the EPGM1 module address by putting or removing the jumper from the A0 pins (see **2.4. EPGM1 Address**).

5. Power up ESIM264/ESIM364 system.

6. Upon successful startup indicator **STATUS** should be blinking indicating successful EPGM1 operation.

7. EPGM1 is ready for use with ESIM264/ESIM364 alarm system.

NOTE: The system supports a mixed combination of Type 1 and Type 2 zone connection types simultaneously regardless of the type (Type 1 or Type 2) selected in the system's configuration. This applies to on-board zones, keypad zones and EPGM1 zones. **Example:** *On-board zone Z1 and keypad zone is wired based on Type 1, while on-board zone Z3 and EPGM1 zone is wired based on Type 2.*

NOTE: ATZ mode is NOT supported by keypad zones and EPGM1 zones. If ATZ mode is enabled, EPGM1 zones must be wired in accordance with the last selected 6-Zone mode zone connection type before the ATZ mode has been enabled. The ATZ mode setting does NOT affect the zone connection type of the keypad zones.

4. LIMITED LIABILITY

The buyer must agree that the system will reduce the risk of fire, theft, burglary or other dangers but does not guarantee against such events. "ELDES UAB" will not take any responsibility regarding personal or property or revenue loss while using the system. "ELDES UAB" liability according to local laws does not exceed value of the purchased system. "ELDES UAB" is not affiliated with any of the Internet providers therefore is not responsible for the quality of Internet service.

Manufacturer Warranty

This device carries a 24-month warranty by the manufacturer "ELDES UAB". Warranty period starts from the day the system has been purchased by the end user. The warranty is valid only if the system has been used as intended, following all guidelines listed in the manual and within specified operating conditions. Receipt must be kept as a proof of purchase date. The warranty is voided if the system has been exposed to mechanical impact, chemicals, high humidity, fluids, corrosive and hazardous environment or other force majeure factors.

Safety instructions

Please read and follow these safety guidelines in order to maintain safety of operators and people around:

- DO NOT use the system where it can be interfere with other devices and cause any potential danger.
- DO NOT use the system with medical devices.
- DO NOT use the system in hazardous environment.
- DO NOT expose the system to high humidity, chemical environment or mechanical impacts.
- DO NOT attempt to personally repair the system.

⚠ Mains power and backup battery of ELDES alarm system must be disconnected before any installation or tuning work starts. The system installation or maintenance must not be done during stormy conditions.

⚠ EPGM1 is fully turned off by disconnecting 2-pole switch device of the main power supply and backup battery of ELDES alarm system.

The WEEE (Waste Electrical and Electronic Equipment) marking on this product (see left) or its documentation indicates that the product must not be disposed of together with household waste. To prevent possible harm to human health and/or the environment, the product must be disposed on in an approved and environmentally safe recycling process. For further information on how to dispose of this product correctly, contact the system supplier, or the local authority responsible for waste disposal in your area.

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