PERFECTA 64 M

ALARM CONTROL PANEL

The PERFECTA 64 M alarm control panel is designed to protect various premises such as flats, single–family houses, terraced houses, offices, etc. It provides protection as required by EN 50131 for Grade 2. The control panel is simple to configure as well as easy and intuitive to operate using keypads, including touchscreen models. Functionalities of the alarm system can also be controlled remotely using the **PERFECTA CONTROL** mobile application and remote control keyfobs. The **ETHM–1 Plus** Ethernet module can also be connected to the control panel – it can be used for both communication with the mobile application* and event reporting, also in Dual Path Reporting mode.

The PERFECTA 64 M control panel makes it possible to create wired and wireless systems – you can connect to it an **ABAX 2** system controller (**ACU–220** or **ACU–280** operating in the frequency band of 868 MHz) or **PERFECTA–RF**, i.e. the **MICRA** wireless system module (frequency band of 433 MHz). Alternatively, the **INT–RX–S** keyfob receiver expansion module may be connected to the control panel.

The PERFECTA 64 M control panel is equipped with a cellular communicator supporting 2G and 4G networks. This feature enables the use of a mobile application with push notifications support, remote configuration of the system using the **PERFECTA Soft** program, event reporting (e.g. to a security agency monitoring station), voice telephone messaging, SMS control and audio alarm verification (listening for sounds from the protected premises). The module supports two nano–SIM cards to ensure uninterrupted communication: if transmission over the first operator's network fails, the second card is automatically selected.

The control panel electronics board is provided with 8 wired zones and 4 wired outputs. Their number can be increased by connecting the **INT–E** zone expansion module and **INT–O** or **INT–ORS** output expansion module. Owing to this, it is possible to expand the system by adding more detectors, sirens, or even actuators (to control the garage door, roller shutters, garden sprinklers). The control panel may also be connected to the **INT–CR** proximity card arm/disarm device. This allows one to control selected system functionalities with proximity cards and tags.

A system based on the PERFECTA 64 M control panel can be divided into four partitions with a choice of three arming modes (day, night or full). Such partitions may be independent of each other or may feature common sections (specified zones).

The system can be configured in two ways: from a computer with the PERFECTA Soft program installed (locally – connection via RS–232 (TTL) port, remotely – using data transmission over a cellular network** or via Ethernet*), as well as from a keypad.

- compliance with EN 50131 Grade 2
- system division into 4 partitions:
  - 3 arming modes in each partition
  - option to assign a zone to 1~4 partitions
  - user–controlled or timer–controlled
- 8 wired programmable zones on the control panel mainboard:
  - configuration options: NO, NC, EOL, 2EOL/NO, 2EOL/NC
  - support for roller shutter and shock detectors
- up to 64 programmable zones
- support for "IP zones" – receiving HTTP notifications sent by IP cameras or other IoT devices – when cooperating with **ETHM–1 Plus** module
- 4 wired programmable outputs on the control panel mainboard:
  - 2 high–current outputs
  - 2 OC–type low–current outputs
- up to 64 programmable outputs (including 4 dedicated outputs to control sirens of the **MICRA** system)
- built–in modules:
  - cellular communicator 2G/4G with two nano–SIM slots (SMS, reporting to a monitoring station, mobile application, push notifications)
  - voice (playback of voice messages for the telephone notification)

- ○ acoustic alarm verification (listening for sounds)
- communication bus for connecting:
  - ○ **INT–TSH210, INT–TSH2R**, **INT–TSG2R**, **INT–KSG2R**, **PRF–LCD** keypads
  - ○ **INT–E**, **INT–O**, **INT–ORS** expansion modules
  - ○ **ABAX 2** wireless system controllers: **ACU–220** or **ACU–280*****
  - ○ **INT–RX–S** keyfob receiver expansion module***
  - ○ **INT–CR**, **INT–IT2** proximity card arm/disarm devices
  - ○ **ETHM–1 Plus** ethernet communication module
- communication interface for connecting the **PERFECTA–RF** – MICRA wireless system module***
- maximum number of supported wireless devices:
  - ○ ABAX 2 system: up to 2 keypads / up to 48 detectors, sirens or other devices
  - ○ MICRA system: up to 2 keypads / up to 64 detectors / up to 4 sirens
- support for wireless keypads:
  - ○ **PRF–LCD–A2** – in the ABAX 2 system
  - ○ **PRF–LCD–WRL** – in the MICRA system
- system control using:
  - ○ keypads
  - ○ **PERFECTA CONTROL** mobile application
  - ○ remote control keyfobs
  - ○ proximity cards and tags – types: 125 kHz EM Marin or 13.56 MHz MIFARE® (depending on the reader/keypad used in the system)
- local or remote software (firmware) updates
- passwords:
  - ○ 62 user passwords
  - ○ 1 service password
- editable names (of users, partitions, zones, outputs and modules) for easy control and supervision of the system
- 8 timers with exceptions setting capability
- 8 thermostats
- memory for 3584 events
- automatic diagnostics of the system main components
- built–in switching power supply:
  - ○ over–current protection
  - ○ battery deep discharge protection
  - ○ battery charging current control
- programming of control panel settings:
  - ○ locally – a keypad or computer with the PERFECTA Soft program installed, connected to the control panel RS–232 (TTL) port
  - ○ remotely – a computer with the PERFECTA Soft program installed, connecting to the control panel using data transmission over a cellular network** or via Ethernet*

* in cooperation with the ETHM–1 Plus module additionally connected using the **RS232–RSTTL** cable with converter

** support for data transmission using the LTE/EDGE/GPRS technology – depending on the cellular network capabilities

***NOTE – it is possible to connect only one of the above–mentioned devices: ACU–220/ACU–280 controller, PERFECTA–RF module or INT–RX–S keyfob receiver expansion module. The system cannot use wireless ABAX 2 and MICRA devices simultaneously.

TECHNICAL DATA

Event log	3584
Partitions	4
Timers	8
Board dimensions	160 x 68 mm
Operating temperature range	-10...+55 °C
Supply voltage (±15%)	18 V AC, 50-60 Hz
Standby mode current consumption	190 mA
Max. current consumption	490 mA
Weight	110 g
Maximum humidity	93±3%
Battery failure voltage threshold (±10%)	11 V
Battery cut-off voltage (±10%)	10,5 V
Environmental class according to EN50130-5	II
Maximum current consumption from the battery	130 mA
Programmable wired inputs	8
Maximum number of programmable inputs	64
Programmable wired outputs	4
Maximum number of programmable outputs	64
Supplying outputs	2
Communication buses	1
Keypads	up to 4
Security grade according to EN 50131	Grade 2
Recommended transformer	40 VA
Users	62
Current-carrying capacity of KPD output	500 mA / 12 V DC
Output voltage range	10,5 V...14 V DC
Battery charging current	500 mA
Power supply output voltage	12 V DC ±15%
Power supply output current	2 A
Low current programmable outputs rating	25 mA / 12 V DC
Current-carrying capacity of programmable high-current outputs	1000 mA / 12 V DC
AUX output	500 mA / 12 V DC
Standby current draw from battery	130 mA