PROXIMITY CARD READER
INT-IT

CE

The INT-IT proximity card reader is dedicated to operation in the intruder alarm systems. It interacts with the SATEL manufactured alarm control panels: INTEGRA (firmware version 1.07 or newer) and VERSA. It enables arming / disarming and alarm clearing in partitions by means of cards, keyfobs and other passive transponders. The proximity card reader is available in a few versions (see Table 1).

Reader name	Modular system manufacturer	Series name
INT-IT-LI	Bticino	LIVING
INT-IT-LH		LIGHT
INT-IT-MA		MAGIC
INT-IT-SY	Gewiss	SYSTEM
INT-IT-PB		PLAYBUS

Table 1. Available reader versions and systems in which they can be installed.
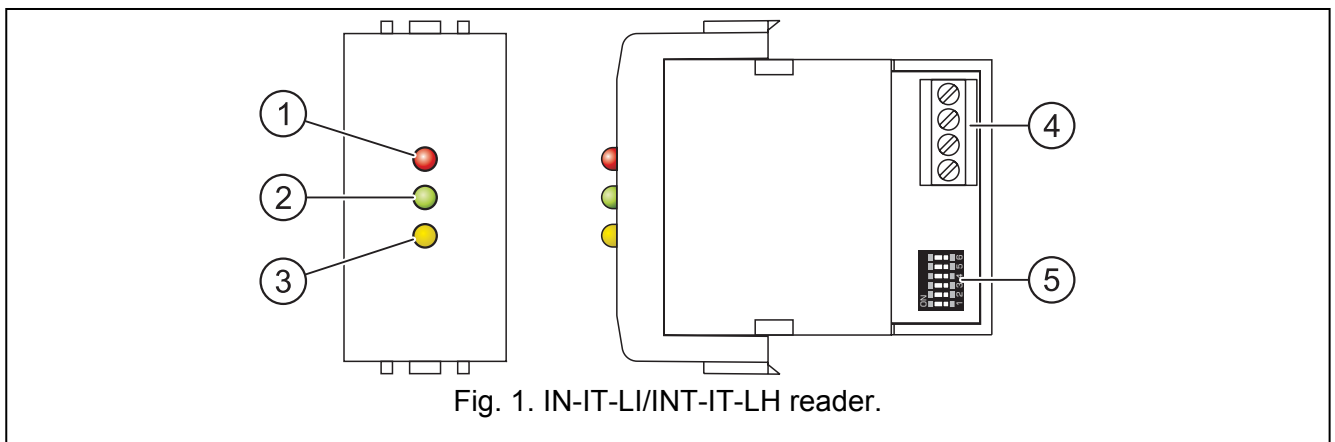
1. Description of the reader

Fig. 1. IN-IT-LI/INT-IT-LH reader.

Explanations for Fig. 1:

1 - red LED.

2 - green LED.

3 - yellow LED.

4 - terminals:

  +EX - supply input

  DT - data

  CK - clock

  COM - common ground

5 - a set of DIP-switches for determining an individual address of the module. The address must be different from those of the other modules connected to the control panel communication bus. The switches from 1 to 5 are used for address setting (the switch 6 is not used). In order to determine the expander address, add up the values set at the individual switches, according to Table 2.

DIP-switch number	1	2	3	4	5
Numerical value (for switch in ON position)	1	2	4	8	16

Table 2.

Note: The address set in the module must meet requirements of the control panel the reader interacts with:
- *INTEGRA control panels: all addresses from the 0 to 31 range are allowed;*
- *VERSA control panels: addresses from the 16 (10h) to 21 (15h) range are allowed.*

2. Installation and startup

⚠️ **All connections should only be made when power supply of the alarm system is disconnected.**

The distance between two proximity card readers must exceed 50 cm. Connect the INT-IT reader to the control panel expander bus, according to the rules described in the installer manual for the particular control panel. After finishing the installation work and starting the alarm system, run the identification function in the control panel. Only once the identification function has been completed, the reader will be correctly supported.

3. Use

Using the proximity card you can:
- arm the system in global mode;
- arm the system in mode A or B (the system behavior in case of arming in mode A or B is defined by the installer – see section PROGRAMMING).
- disarm the system;
- clear alarm in the system.

The installer will determine the partitions to be controlled by the reader. The user can only control the partitions which he is authorized to access.

Note: The INTEGRA control panel does not allow to change the armed mode in partitions. The partition must be disarmed first, and only then another armed mode can be turned on.

3.1 Arming the system in global mode

1. Present the card to the reader and hold up until the red LED comes on.
2. Remove the card from the reader.

3.2 Arming the system in mode A

1. Present the card to the reader and hold up until the green LED comes on.
2. Remove the card from the reader.

3.3 Arming the system in mode B

1. Present the card to the reader and hold up until the yellow LED comes on.
2. Remove the card from the reader.

3.4 Disarming / alarm clearing in the system

Present the card to the reader and remove it after a while (approx. 0.5 second).

3.5 Audible signaling

If the SIGNALING CARD (HARDWARE) option is enabled, the reader will generate a single short beep after the card has been read and – if the card is held up – after each successive LED comes on.
After removal of the card, the reader may generate the following sounds:
3 short beeps – confirmation of arming / disarming, alarm clearing;

3 long beeps – denial of arming / disarming, alarm clearing (the user does not have required rights, or execution of the operation is impossible for other reasons, e.g. there no partitions which can be disarmed or where alarm can be cleared).

2 short beeps [only when interacting with the INTEGRA control panel] – awaiting the second card (the partition requires two codes for arming / disarming).

2 long beeps – unknown card;

The following audible signals can be generated in response to events in partitions served by the reader:

Continuous beep – alarm.

Long beeps separated by short pauses – alarm memory.

Long beep every second – fire alarm.

Short beep every 2 seconds – fire alarm memory.

2 short beeps every second – entry delay countdown.

Long beeps every 3 seconds terminated by a series of short beeps (during the last 10 seconds before arming) and one long beep – exit delay countdown.

Sequence of 7 beeps of diminishing duration repeated over and over – auto-arming delay countdown.

3.6   Signaling by means of LEDs

Signaling when the proximity card is at the reader:

Red LED lit – after removal of the card, the system will be armed in full mode (in the installer defined partitions).

Green LED lit – after removal of the card, the system will be armed in A mode (the installer defines which partitions and in what mode will be armed – see section PROGRAMMING).

Yellow LED lit – after removal of the card, the system will be armed in B mode (the installer defines which partitions and in what mode will be armed – see section PROGRAMMING).

Signaling when there is no proximity card at the reader:

All LEDs extinguished – none of the partitions controlled by the reader is armed or in alarm condition.

Red LED lit, the other LEDs extinguished – all the partitions which are to be armed after removal of the card when the red LED is lit are fully armed.

Red and green LEDs lit – partitions controlled by the reader are armed in A mode.

Red and yellow LEDs lit – partitions controlled by the reader are armed in B mode.

Red LED lit, dimming momentarily, the other LEDs extinguished – at least one of the partitions controlled by the reader is armed.

Red LED lights up every 2 seconds, the other LEDs extinguished – alarm or alarm memory, when none of the partitions is armed.

Red LED blinking slowly – alarm or alarm memory, when at least one of the partitions controlled by the reader is armed.

Red and yellow LEDs blinking alternately [only during interaction with INTEGRA] – awaiting the second code input.

All LEDs blinking steadily – no communication with VERSA control panel.

Red, yellow and green LEDs blinking in turn – no communication with INTEGRA control panel.

4. Programming

The reader can be configured by means of the LCD keypad or the DLOADX program.

Name – individual name of the device (up to 16 characters).

Tamper alarms in partition – the partition in which tamper alarm will be triggered, if the device is tampered or removed from the system.

LED R – way of partition reaction after removal of the card when the red LED is lit. The partition can either enter the fully armed mode or its status can remain unchanged.

LED G / LED Y – way of partition reaction after removal of the card when the green LED (mode A) or the yellow LED (mode B) is lit. The partition can enter one of the three armed modes, it can be disarmed `VERSA only` or its status can remain unchanged.

Reader options:

- **Alarm signaling** – the reader is audibly signaling alarms during the KEYPAD'S ALARM TIME [VERSA] / GLOBAL ALARM TIME [INTEGRA].

- **Alarm signaling until canceled** – the reader is audibly signaling the alarm memory.

- **3 wrong cards alarm** – reading the unknown card code three times by the reader will trigger alarm.

- **Signaling entry delay** – the reader is audibly signaling the entry delay countdown.

- **Signaling exit delay** – the reader is audibly signaling the exit delay countdown, and in case of the VERSA control panel also the auto-arming delay.

- **Auto-arm delay countdown** `INTEGRA only` – the reader is acoustically signaling the auto-arming delay countdown.

- **Signaling card (hardware)** – the reader is signaling by a single beep that the card code has been read out or the LED has lit up (the code will be sent to the control panel after removal of the card and only then the reader will audibly signal its reaction to the read code).

- **Second code wait signaling** `INTEGRA only` – the reader is signaling by means of LEDs that it is waiting for the second card.

5. Specification

Supply voltage ....12 V DC ±15%

Maximum current consumption .... 80 mA

Dimensions: INT-IT-LI / INT-IT-LH...22 x 47 x 50 mm

                          INT-IT-MA...22 x 46 x 52 mm

                          INT-IT-SY ....23 x 46 x 50 mm

                          INT-IT-PB ....25 x 48 x 50 mm

Operating temperature range .... -10...+55 °C

Working frequency... 125 kHz

Supported card standards ....UNIQUE, EM4001, EM4002, EM4003, EM4102

Weight ....29 g