928 FingerTRAX+G

A powerful terminal integrating 1:1 Fingerprint Recognition
for Access Control and Time & Attendance applications

Description

Based on the versatile TRAX+G platform, FingerTRAX+G is a **Time & Attendance** and **Access Control** terminal. It integrates a fingerprint recognition module for the verification of the user identity.

Overview

- **Flexible**
  - possibility of realizing several configurations and of using fingerprint templates for identification in different types of transactions

- **High security Access Control**
- **Reliable Time & Attendance**
  - user's card reading or PIN entry have to be confirmed by fingerprint recognition **(1:1 verification mode)**
  - user recognition fully guaranteed
  - scarred fingers do not affect fingerprint recognition

- **Protection of personal data**
  - no images are stored inside FingerTRAX+G
  - during the memorizing phase all fingerprints are stored as templates and they are associated with the user's personal code
  - it is then possible to transfer the templates to all other FingerTRAX+G terminals
  - all transactions take place in such a way as to protect individual privacy

Functionalities

- The TRAX+G based authorization list, together with the integrated fingerprint reader, ensure that **only an authorized person can pass through.**
- FingerTRAX+G can identify a user by fingerprint recognition **(1:1 verification)** ONLY **after** proximity card reading or PIN entering.
- All the usual functions of TRAX+G are available: **time zone check, programmed access criteria, use of PINs, checking inputs and piloting relays, transactions recording,** etc.,

allowing for an access control system with a high security level.

- Every single template is stored in an **archive present on the file system.** One template is associated with each single user code.
- **The user's template can be stored on a MIFARE® or LEGIC® MIM1024 card**.
- It is possible to **import and export the fingerprint templates** (but not the images), without repeating the enrolling process.
- **Each fingerprint template size can vary**, with about 300 bytes as average.
- Each fingerprint is recognized within a few seconds (1-2 sec.). Typical applications: 10 to 150 users in **1:1 verification mode with one fingerprint per user.**
- It is possible to **delete** the template associated with a single user's code. The user code can vary from a minimun of 2 to a maximum of 11 digits.
- Most of the **managing functions**, like enrolling new users, deleting old ones, can be performed **from the FingerTRAX+G console.**

- It is possible to carry out the **on-line verification** using a templates database stored on a PC. In this case, the maximum number of users corresponds with the maximum value represented by the number of digits used for the user's code.

Rewritable cards

- **MIFARE® option**: A special **MIFARE® FingerTRAX+G version** uses an ISO 14443A reader/writer module (Mifare™) instead of the 125KHz read only module. An enhanced FW allows to store the fingerprint templates in a proximity card (Mifare classic 1K).
- **LEGIC® option:** The **new FingerTRAX+G advant version** integrates the new RFID/advant LEGIC® module by TMC. An enhanced FW allows to store and manage fingerprint templates on 13.56MHz proximity cards (prime MIM1024 or ***faster*** ISO 15693 ATC1024).
- During enrollment, the user is asked to save the template onto the card. If he/she agrees, then he/she is also asked if the template must be removed from the internal memory module (this can also be carried out at a later date).
- When a **user card containing a template** is read by FingerTRAX+G, it downloads the template and then asks the user to perform a fingerprint read to verify his/her identity.
- If the **card is empty and the user's fingerprint has been stored in the module**, the MIFARE® and/or LEGIC® card can still be used for the normal 1:1 verification.

HW Specifications	
Biometric Sensor	• CMOS technology, capacitive effect pixel-sensing technology, 18x12.8 mm, resolution: 256x360 pixels (508 dpi) • PLEASE NOTE: as the sensor is subject to wear and user's negligence, it is not covered by our two year warranty.
Fingerprint Verification Module	• ARCtagent-A4 CPU, RISC architecture 32 bit with 256 KB ROM
Proximity readers	• RF reader for 64 bit *read only* 125 KHz tags • RFID LEGIC® advant for LEGIC® "advant" ISO 15693 and "prime" multiapplication cards • 13.56 MHz MIFARE® reader writer module in ISO 14443A standard
Console	• 128x64 graphic, superTwist white led backlit, up to 4 fonts on the screen at the same time. Up to 25X6 text rows, icon bitmaps support. • 20 keys membrane keypad with function keys • Single tone acustic signal
Communication ports	• NET92: RS485 with TMC protocol • COM1: used by the biometric module • Ethernet: RJ45connector -10BaseT-UPD-IP. POE (Power over Ethernet) compatibility.
Input/Output	• Input: 1 digital (optocoupled) • Output: 1 relay 2A 60V - optional up to 4 Telerelays
Internal reader	• Proximity 125 KHz, 64 bit read only (see RFID). Without internal reader on request. • With R/W module for MIFARE® or LEGIC® advant cards on request.
Barcode Interface	• EAN, I2/5, C39, C128, EAN128
Power supply	• 0 to 40 Vdc, 100-400 mA at 12 Vdc (depending on versions)
Battery	• **Backup battery:** 550 mAH • **RF reader average consumption:** 170 mA
Physical Characteristics	• ABS-VO casing. IP65 • Size: 120x200x100 mm (LxHxW) - Mass: 740 g - 940 g
Working environment	• Temperatures: when functioning -10°C +50°C; in storage: -20°C +70°C • Humidity: from 0° to 95% non condensing