



## *Architect & Engineer Specification*

# **FINGER007 Biometric Standalone Access Controller**

November 14, 2005

## **1 Introduction**

The intent of this document is to describe the specification of FINGER007 Biometric standalone access controller manufactured by IDTECK Co., Ltd. All the information is provided in detail for system architect and engineers designing access control system.

## **2 Description**

The FINGER007 biometric standalone access controller shall provide total control of access control for single door. With built-in optical fingerprint reader and 125KHz proximity reader, it shall dynamically control up to 4,000 users / 26,000 Events. Anti-pass back operation shall be supported through external reader port. Combined with Starwatch Dual Pro software, the FINGER007 shall provide easy yet secure access control solution.

## **3 Mechanical Specification**

- 3.1 The FINGER007 biometric reader shall measure 6.36" x 5.28" x 1.9" (161.5 x 134 x 48.5mm). FINGER007 shall arrive disassembled and contains following;
  - 3.1.1 A wall mounting plate
  - 3.1.2 The body that mounts to the wall mounting plate
- 3.2 The FINGER007 shall have a dark pearl gray body
- 3.3 The FINGER007 shall weight 547g (Packaged weight for shipping shall be 700g)

## **4 Electrical Specification**

- 4.1 The FINGER007 shall contain 32bit ARM9 and Dual 8bit Microprocessor
- 4.2 The FINGER007 shall contain memory as following.
  - 4.2.1 Finger Module shall have following memory
    - 4.2.1.1 Program memory of 128KByte Flash memory
    - 4.2.1.2 Data memory of 128KByte/256KByte/512KByte Flash memory
  - 4.2.2 Controller part of FINGER007 shall have following memory
    - 4.2.2.1 Program memory of 64KByte ROM.
    - 4.2.2.2 Data memory of 512KByte SRAM.
- 4.3 The FINGER007 shall contain LCD which includes 1 x Character LCD Module, 2 line x 16ch, 65.6mm x 13.8mm.
- 4.4 The FINGER007 shall have a 16 key numeric Keypad with back light.
- 4.5 The FINGER007 shall indicate its status through red, green, yellow LEDs.
- 4.6 The FINGER007 shall have piezo buzzer for the beeper.
- 4.7 Dual temper switch shall be built in to the FINGER007 to provide safe operation.
- 4.8 The FINGER007 standalone proximity reader shall operate on 12V. Max 300mA.

## **5 Fingerprint reader Specification**

- 5.1 The FINGER007 shall include built in optical fingerprint module.
- 5.2 1,000/2,000/4,000 Fingerprint templates shall be stored as dual finger templates.
- 5.3 Dual fingerprint template size shall be 800Kbytes.
- 5.4 The FINGER007 shall provide 1:n identification up to 4000 users.
- 5.5 Optional touch sensor shall be available with FINGER007 to provide easy identification.

## **6 RFID reader Specification**

- 6.1 The FINGER007 shall include built-in 125KHz RF reader.
- 6.2 The FINGER007 shall provide 1 external reader port for anti-pass back function.
- 6.3 Reading Range of FINGER007 shall vary depending on the types of the card that are used. The



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FINGER007 shall accept following proximity cards with stated reading range.

- 6.3.1 Passive cards that are stated below shall operate with the FINGER007 and shall have declared reading range.
  - 6.3.1.1 IDC 80 card (ISO credit card size and thickness) shall have 4 inch (10 Cm) reading range.
  - 6.3.1.2 IDC 170 card (clamshell card) shall have 4 inch (10 Cm) reading range.
  - 6.3.1.3 IDK 50 key tag shall have 2 inch (5 Cm) reading range.
  - 6.3.1.4 IMC125 mini proximity Sticker Tag shall have 2 inch (5 Cm) reading range.
- 6.3.2 Active cards that are stated below shall operate with the FINGER007 and shall have declared reading range.
  - 6.3.2.1 IDA 200 active card shall have 15 inch (40 Cm) reading range.

## 7 Communication Specification

- 7.1 External reader port included in FINGER007 shall supports 26 bit Wiegand communication.
- 7.2 The FINGER007 shall provide RS422, RS232 and optional TCP/IP communication.
- 7.3 The FINGER007 shall support baud rate of 4800bps, 9600bps(default), 19200bps, and 38400bps software programmable.
- 7.4 Input and Output as following shall be provided by the FINGER007.
  - 7.4.1 The FINGER007 shall have 4 input ports (isolation).
  - 7.4.2 The FINGER007 shall have 4 output ports as following, 2 form-C relay (Com, NO, NC) Rating 2A, 2EA TTL.

## 8 Environmental Specification

- 8.1 Operating Temperature
  - 8.1.1 The FINGER007 shall operate temperature between 0 ° C ~ +50 ° C.
- 8.2 Operating Humidity
  - 8.2.1 The FINGER007 shall operate humidity between 10% ~ 90% RH(Non-condensing)

## 9 Certification and Approvals

- 9.1 The FINGER007 shall have following certification
  - 9.1.1 FCC certification
  - 9.1.2 UL certification
  - 9.1.3 CE certification
  - 9.1.4 MIC certification

### Technical Support Contact Information:

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