



## Architect & Engineer Specification

# 505R Standalone Proximity Access Controller

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### 1 Introduction

The intent of this document is to describe the specification of 505R standalone proximity 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 505R standalone proximity access controller shall provide total control of access control for single door. With built-in 125KHz proximity reader, it shall dynamically control up to 50,000 users /50,000 Events. Anti-pass back operation shall be supported through external reader port. Combined with Starwatch Dual Pro software, the 505R shall provide easy yet secure access control solution.

### 3 Mechanical Specification

- 3.1 The 505R proximity reader shall measure 5.9" x 4.72" x 1.55" (150 x 120 x 39.5mm). 505R 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 505R shall have a dark pearl gray body
- 3.3 The 505R shall weight 397g (Packaged weight for shipping shall be 600g)

### 4 Electrical Specification

- 4.1 The 505R shall contain Dual 8bit Microprocessor
- 4.2 The 505R shall contain memory as following.
  - 4.2.1 Program memory of 128KByte Flash Memory.
  - 4.2.2 Data memory of 1MByte Flash Memory.
- 4.3 The 505R shall contain LCD which includes 1 x Character LCD Module, 2 line x 16ch, 65.6mm x 13.8mm.
- 4.4 The 505R shall have a 16 key numeric Keypad with back light.
- 4.5 The 505R shall indicate its status through red, green, yellow LEDs.
- 4.6 The 505R shall include built-in piezo buzzer for alarm purpose.
- 4.7 The 505R standalone proximity reader shall operate on 12V. Max 350mA.

### 5 RFID reader Specification

- 5.1 The 505R shall include built-in 125KHz RF reader.
- 5.2 The 505R shall provide 1 external reader port for anti-pass back
- 5.3 Reading Range of 505R shall vary depending on the types of the card that are used. The 505R shall accept following proximity cards with stated reading range.
  - 5.3.1 Passive cards that are stated below shall operate with the 505R and shall have declared reading range.
    - 5.3.1.1 IDC 80 card (ISO credit card size and thickness) shall have 4 inch (10 Cm) reading range.
    - 5.3.1.2 IDC 170 card (clamshell card) shall have 4 inch (10 Cm) reading range.
    - 5.3.1.3 IDK 50 key tag shall have 2 inch (5 Cm) reading range.
    - 5.3.1.4 IMC125 mini proximity Sticker Tag shall have 2 inch (5 Cm) reading range.
  - 5.3.2 Active cards that are stated below shall operate with the 505R and shall have declared reading range.
    - 5.3.2.1 **IDA 200 active card shall have 15 inch (40 Cm) reading range.**



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## 6 Communication Specification

- 6.1 External reader port included in 505R shall supports 26 bit Wiegand communication.
- 6.2 The 505R shall provide RS422, RS232 and optional TCP/IP communication.
- 6.3 The 505R shall support baud rate of 9600bps (default), 19200bps, 38400bps, 57600bps and 115200bps software programmable.
- 6.4 Input and Output as following shall be provided by the 505R.
  - 6.4.1 The 505R shall have 4 input ports (isolation).
  - 6.4.2 The 505R shall have 4 output ports as following, 2 form-C relay (Com, NO, NC) Rating 2A, 2EA TTL.

## 7 Environmental Specification

- 7.1 Operating Temperature
  - 7.1.1 The 505R shall operate temperature between 0° C ~ +50° C.
- 7.2 Operating Humidity
  - 7.2.1 The 505R shall operate humidity between 10% ~ 90% RH(Non-condensing)

## 8 Certification and Approvals

- 8.1 The 505R shall have following certification
  - 8.1.1 FCC certification
  - 8.1.2 UL certification
  - 8.1.3 CE certification
  - 8.1.4 MIC certification

### Technical Support Contact Information:

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