



## *Architect & Engineer Specification*

# **RF70 Long Range Proximity Reader**

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### **1 Introduction**

The intent of this document is to describe the specification of RF70 long range proximity reader manufactured by IDTECK Co., Ltd. All the information is provided in detail for system architect and engineers designing access control system.

### **2 Description**

The RF70 long range proximity reader shall provide various applications such as Hands Free Access Control, Parking Control and Factory Automations with one card solution for in and out door use. The RF70 shall have no interference with windshield tint. Combined with Starwatch Dual Pro software, the RF70 shall provide easy yet secure access control solution.

### **3 Mechanical Specification**

- 3.1 The RF70 long range proximity reader shall measure 11.4" x 11.4" x 2.5" (290 x 290 x 63mm).  
RF70 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
  - 3.1.3 Mounting bracket to install RF70 to mounting pole is optional.
- 3.2 The RF70 shall have a black body
- 3.3 The RF70 shall have built-in tuning circuitry for the exact tuning for maximum read range wherever the RF70 is mounted to different materials.
- 3.4 The RF70 shall weight 1.4kg (Packaged weight for shipping shall be 1.8kg)

### **4 Electrical Specification**

- 4.1 The RF70 long range proximity reader shall indicate its status through red and green LED.
- 4.2 The RF70 shall operate on 12V. Max 500mA.
- 4.3 The RF70 shall have external buzzer control input that from 0 to 5 V, Max 50mA and impedance 10k ohm
- 4.4 The RF70 shall have external LED control input that from 0 to 5 V, Max 50mA and impedance 10k ohm
- 4.5 The RF70 shall have 125KHz frequency.

### **5 RFID reader Specification**

- 5.1 Reading Range of the RF70 shall vary depending on the types of the card that are used. The RF70 shall accept following proximity cards with stated reading range.
  - 5.1.1 Passive cards those are stated below shall operate with the RF70 and shall have declared reading range.
    - 5.1.1.1 IDC 80 card (ISO credit card size and thickness) shall have 18 inch (45 Cm) reading range.
    - 5.1.1.2 IDC 170 card (clamshell card) shall have 18 inch (45 Cm) reading range.
    - 5.1.1.3 IDK 50 key tag shall have 12 inch (30 Cm) reading range.
  - 5.1.2 Active cards that are stated below shall operate with the 100R and shall have declared reading range.
    - 5.1.2.1 IDA 150 active card shall have 5 feet (1.5 m) reading range.
    - 5.1.2.2 IDA 200 active card shall have 7 feet (2.1 m) reading range.
- 5.2 The RF70 shall have PSK modulation.

### **6 Communication Specification**

- 6.1 The RF70 shall provide 26bit Wiegand, RS232 and ABA Track II magnetic stripe format



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## **7 Environmental Specification**

### **7.1 Operating Temperature**

7.1.1 The RF70 shall operate temperature between -35 ° C ~ +65 ° C.

### **7.2 Operating Humidity**

7.2.1 The RF70 shall operate humidity between 10% ~ 90% RH(Non-condensing)

7.3 The RF70 shall be 100% weather proof.

## **8 Certification and Approvals**

8.1 The RF70 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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