



**IDTECK Co., Ltd.**

5F Ace Techno Tower B/D, 684-1, Deungchon-Dong, Gangseo-Gu, Seoul, 157-030, Korea  
Tel : 82-2-2659-0055 Fax : 82-2-2659-0086 www.idteck.com webmaster@idteck.com



## *Architect & Engineer Specification*

# **RF20 Proximity Card Reader**

*October 4, 2005*

### **1 Introduction**

The intent of this document is to describe the specification of RF20 Proximity Card 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 RF20 Proximity Card Reader shall provide various applications with one card solution for in and out door use even in harsh environment. The RF20 shall be successfully installed on metal door frame and mullion. Combined with Starwatch Dual or iTDC Pro software, the RF20 shall provide easy yet secure access control solution.

### **3 Mechanical Specification**

- 3.1 The RF20 Proximity Card Reader shall measure 3" x 4.89" x 0.87" (76 x 124 x 23.5mm).
- 3.2 The RF20 shall have a dark pearl gray body
- 3.3 The RF20 shall weight 185g (Packaged weight for shipping shall be 200g)

### **4 Electrical Specification**

- 4.1 The RF20 Proximity Card Reader shall indicate its status through red and green LED and buzzer.
- 4.2 The RF20 shall operate on 12V. Max 180mA.
- 4.3 The RF20 shall have 125KHz frequency.

### **5 RFID reader Specification**

- 5.1 Reading range of the RF20 shall vary depending on the types of the card that are used. The RF20 shall accept following proximity cards with stated reading range.
  - 5.1.1 Passive cards those are stated below shall operate with the RF20 and shall have declared reading range.
    - 5.1.1.1 IDC 80 card (ISO credit card size and thickness) shall have 4inch (10 Cm) reading range.
    - 5.1.1.2 IDC 170 card (clamshell card) shall have 4 inch (10 Cm) reading range.
    - 5.1.1.3 IDK 50 key tag shall have 2 inch (5 Cm) reading range.
    - 5.1.1.4 IMC 125 coin shall have 2 inch (5 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 12inch (30 cm) reading range.
    - 5.1.2.2 IDA 200 active card shall have 15inch (40 cm) reading range.
- 5.2 The RF20 shall have PSK modulation.
- 5.3 The RF20 shall have Reverse power polarity protection
- 5.4 The RF20 shall have supervisory signal optionally

### **6 Communication Specification**

- 6.1 The RF20 shall provide 26bit Wiegand and optional RS232 and ABA Track II magnetic stripe format



**IDTECK Co., Ltd.**

5F Ace Techno Tower B/D, 684-1, Deungchon-Dong, Gangseo-Gu, Seoul, 157-030, Korea  
Tel : 82-2-2659-0055 Fax : 82-2-2659-0086 www.idteck.com webmaster@idteck.com



## **7 Environmental Specification**

### **7.1 Operating Temperature**

7.1.1 The RF20 shall operate temperature between -35 ° C ~ +65 ° C.

### **7.2 Operating Humidity**

7.2.1 The RF20 shall operate humidity between 10% ~ 90% RH(Non-condensing)

7.3 The RF20 shall be 100% weather proof.

## **8 Certification and Approvals**

8.1 The RF20 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:**

#### **IDTECK**

5F, Ace Techno Tower B/D, 684-1 Deungchon-Dong

Gangseo-Gu, Seoul, 157-030

Republic of Korea

Hours: 0900 ~ 1900

Tel: 82-2-2659-0055

Fax: 82-2-2659-0086

E-mail: [webmaster@idteck.com](mailto:webmaster@idteck.com)

Web: [www.idteck.com](http://www.idteck.com)

### **Disclaimer**

The information in the document has been carefully checked and reliable. IDTECK reserves the right to modify and revise the document without any notice. IDTECK holds no reliability for in accuracies in the document. If you discover any discrepancy in this document please contact us via email listed above or phone.