

IDTECK FGR006SRB

**Fingerprint Stored
Smart Card Reader**



Table of Contents

1. Important Safety Instructions.....	3
2. General	3
3. Features	4
4. Identifying Supplied Parts.....	4
5. Specification	5
6. Installation	6
7. Wire Color Table.....	7
8. Wire Connection to Access Controller	8
9. Operation	8
10. FCC Registration Information.....	9
11. Warranty Policy and Limitation of Liability	10

1. Important Safety Instructions

When using **Fingerprint Stored Smart Card Reader**, basic safety precautions should always be followed to reduce the risk of fire, electrical shock, and injury to persons.

In addition, the following safety guides should also be followed:

1. **Fully** read and understand all instructions and follow them completely.
2. **Follow** all warnings and instructions marked on the product.
3. **Do not** use liquid or aerosol cleaners. Use a damp cloth for cleaning. If necessary, use mild soap.
4. **Do not** use this product near water.
5. **Only** operate this product using the type of power source indicated. If you are not sure of the type of power supplied to your installation site, consult your dealer or local power company.
6. **Never** insert objects of any kind into the product or through the cabinet slots as they may touch voltage points and/or short circuit parts possibly resulting in fire or electric shock.
Never spill liquid of any kind on the product.
7. **Never** disassemble this product by yourself; take the unit to a qualified service center whenever service or repair is required. Opening or removing the covers may expose you to dangerous voltages or other risks. Also, incorrect reassembly can cause electric shock when the unit is subsequently used.
8. **Unplug** this product from the Direct Current (DC) power source and refer to qualified service personnel under these conditions:
 - a. When the power supply cord or plug is damaged or frayed.
 - b. If liquid has been spilled on the product.
 - c. If the product does not operate normally after following the operating instructions in this manual.
Adjust only those controls that are covered by the operating instructions in this manual. Improper adjustment of other controls that are not covered by this manual may damage the unit and will often require extensive work by a qualified technician to restore normal operation.
 - d. If the product exhibits a distinct change in performance.

2. General

The **IDTECK FGR006SRB** is a Biometrics and Proximity Reader which is compatible to existing proximity readers. The **IDTECK FGR006SRB** can be connected to any existing access control panel and you will have personal authorization by one's fingerprint to avoid any access from unauthorized persons.

The **IDTECK FGR006SRB** has a built-in 13.56MHz Mifare proximity reader and fingerprint module so that accesses are allowed only when the personal IDs and fingerprints are authorized.

The **IDTECK FGR006SRB** reads the personal ID and the fingerprint template directly from the card so that the numbers of fingerprint user is unlimited. Its modern design gives you an easy installation (by just replacing existing reader) to metal door frame (mullion) or to any flat wall surface.

The **IDTECK FGR006SRB** ensures you a successful operation where you want biometrics access control. The **IDTECK FGR006SRB** has two LEDs of red and green and a beeper inside to guarantee you an accurate and reliable access control.

3. Features

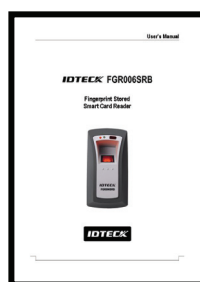
- 1:1 Verification
- Fingerprint & 13.56 MHz [MIFARE] Smart Card Reader and Fingerprint Verification
- Read Portable Smart Card that is stored Fingerprint Template programmed on PRG2000B
- ID Only Function for Fingerprint Unregisterable Person through Smart Card is programmed by PRG2000B
- Unlimited Fingerprint User Storable
(Depend on Number of Corresponding Controller Users)
- Decode Encrypted Biometrics Data Using Patented Encryption Algorithm
- Protected ID and Fingerprint Template Copy
- Support STAR PRG2000B Programmer with ID & Fingerprint Template Issuing Software
- 26bit Wiegand and RS232 (default), ABA Track II (optional) Output Format
- Network Communication via RS232, TCP/IP (External Converter required)
- No Need to Manage Database or Templates
- Flexible Quality Solution to Suit Any Application
- Secure Sign-on Facility
- High Protection from Scratch and ESD (Electro Static Discharge)
- High Quality Optical Sensor
- Tamper Switch
- Mode Selection: Card Only / Card + Fingerprint
- Compatible Software: STARWATCH DUAL PRO I / II, STARWATCH iTDC PRO I / II
- Compatible Controller: iCON100, iTDC, Third Party Controller, FINGER007SRB
- Compatible Reader: SR10B, SR30B, SRK101B

4. Identifying Supplied Parts

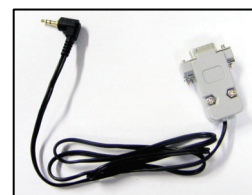
Please unpack and check the contents of the box.



Main Unit



User's Manual



**RS232 Serial Port
(Optional)**



**3.0*30 Screw
(2ea)**



**4.0*40 Screw
(2ea)**



**Anchor Bolt
(2ea)**

5. Specification

Model			FGR006SRB
CPU			32bit ARM9 and 8bit Microprocessor
Memory	Fingerprint Module	Program Memory	1MByte Flash Memory
		Data Memory	8MByte SDRAM
	Reader	Program Memory	128KByte Flash Memory
		Data Memory	4KByte SRAM
User			Unlimited Fingerprint Users
Fingerprint Template Size			400Bytes for 1 Fingerprint Template
Frequency			13.56MHz
Read Range			ISK50 / IMC135: Up to 2 inches (5cm), ISC80: Up to 4 inches (10cm)
Reading Time (Card)			500ms
Verification Time			Less than 1sec.
Power / Current			DC 12V / Max.350mA
Input Port			2 Ports (External LED Control, External Buzzer Control)
Output Port			2 Ports (Error-Output , OK-Output (Open Collector Output))
LED Indicator			2 Array LED Indicators (Red and Green)
Beeper			Piezo Buzzer
Operating Temperature		Fingerprint Module	-15° to +40°C (+5° to +104°F)
		Controller	-15° to +70°C (+5° to +158°F)
		RF Reader	-35° to + 65°C (-31° to +149°F)
Operating Humidity			10% to 90% relative humidity non-condensing
Color			Pearl Dark Gray and Light Gray
Material			Polycarbonate
Dimension (W x H x T)			66mm x 129mm x 52mm (2.6" x 5.1" x 2.0")
Weight			259.5g (0.57lbs)
Certification			FCC, CE, MIC

* Fingerprint Module Specification

Resolution	500dpi
Capture Image Size	356 X 292 pixels
Extraction Image Size	248 X 292 pixels
Sensing Area	12.7 X 14.9 mm
Scanner	High Quality Option Sensor
FAR(False Acceptance Ratio)	0.001%
FRR(False Reject Ratio)	0.1%
ESD(Electro Static Discharge)	±10KV (indirect)
Verification Time	Less than 1sec.

[Card reading range by Contactless Smart[Mifare] Reader Series]

Model		ISC80	ISK50	IMC135	IHC80
Read Range	SR10 / SR30 / SRK101	Up to 4 inches (10cm)	Up to 2 inches (5cm)		
	SR10B / SR30B / SRK101B	Up to 4 inches (10cm)	Up to 2 inches (5cm)		
	SR10RW / SR30RW / SRK101RW	Up to 4 inches (10cm)	Up to 2 inches (5cm)		
	FINGER007SR(B) FINGER006SR(B) FGR006SR(B)	Up to 4 inches (10cm)	Up to 2 inches (5cm)		
	SR505	Up to 4 inches (10cm)	Up to 2 inches (5cm)		
	FACE007SR FACE006SR	Up to 4 inches (10cm)	Up to 2 inches (5cm)		

6. Installation

6-1. Mullion/Wall Mount

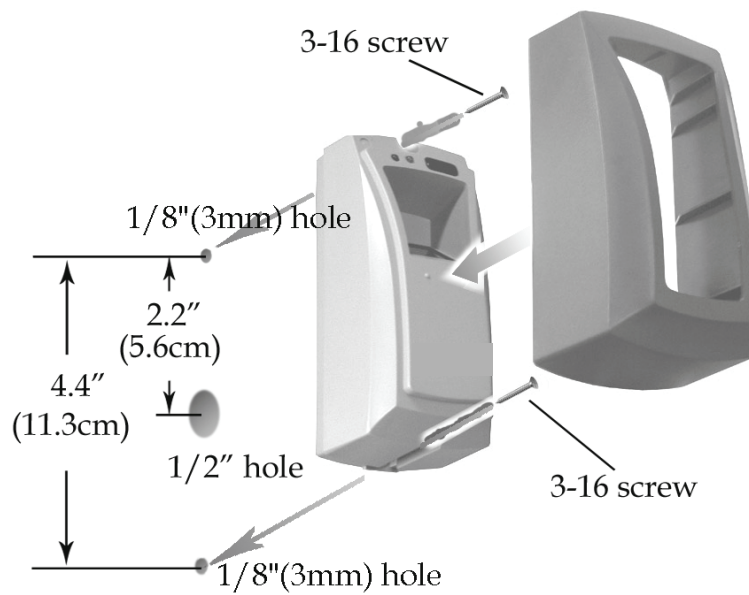
Drill two Ø1/8"(3mm) holes, 4.4"(113mm) apart in vertical and drill one Ø1/2" (12mm) hole for the reader cable 2.2"(56mm) apart from the top hole.

6-2. Connect wires between the access control panel and FGR006SRB reader then put reader cable into the center hole and install the main unit by using two 3-16 screws.

6-3. Put bezel into the main unit then push bezel until you hear the locking sound.

6-4. The maximum Wiegand cable length is 100 meter on a condition described below.

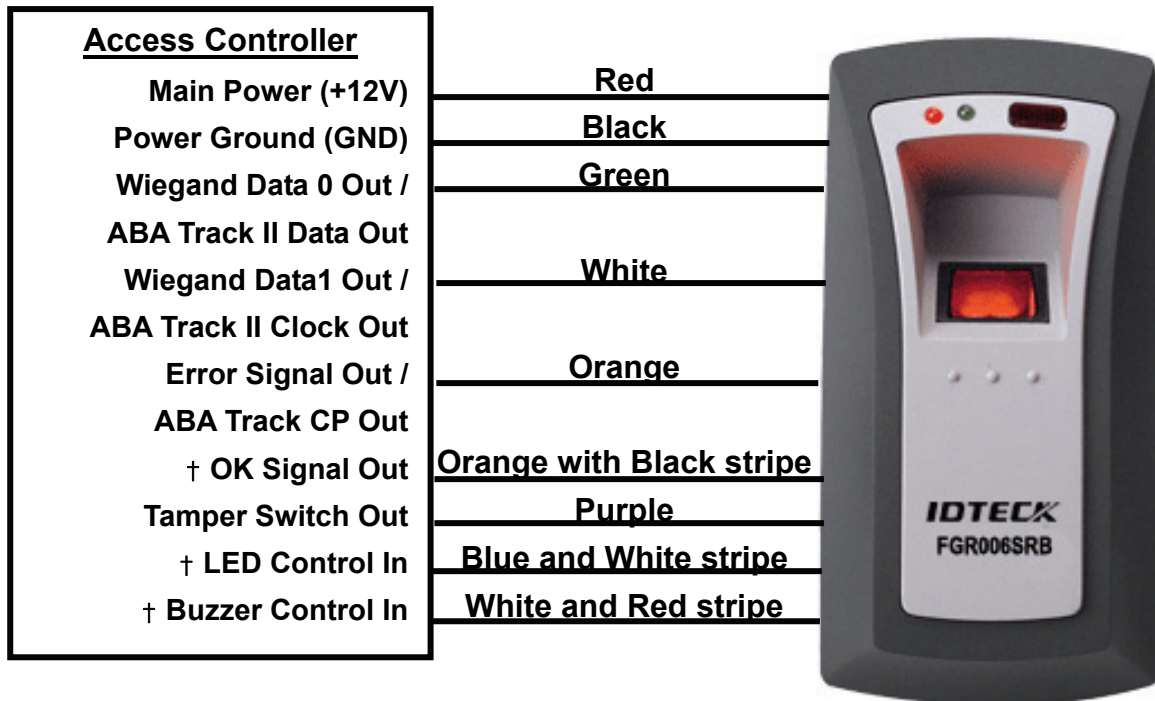
- Controller : ICON100 V4.0 or greater
- Cable : AWG #24 twisted pair



7. Wire Color Table

SIGNAL	COLOR
Main Power (+12V)	Red
Power Ground (GND)	Black
Wiegand Data 0 Out / ABA Track II Data Out	Green
Wiegand Data 1 Out / ABA Track II Clock Out	White
Error Signal Out / ABA Track II CP Out	Orange
+ OK Signal Out	Orange with Black stripe
Tamper Switch Out	Purple
+ LED Control In	Blue with White stripe
+ Buzzer Control In	White with Red stripe
* Please cut out tail connector before installation. † FGR006SRB (V3.0.0 or Over included)	

8. Wire Connection to Access Controller



† FGR006SRB (V3.0.0 or Over included)

9. Operation

9-1. Apply power, FGR006SRB will beep 1 time and the red LED will turn on after the initialization.

9-2. Present a proximity card to the FGR006SRB until the fingerprint scanner lights on.

9-3. Put your finger on the fingerprint scanner for authorization.

9-4. If your fingerprint is authorized then the FGR006SRB makes the green LED lit and a beep sound for a second, sending your card ID to the access controller.

If your fingerprint is not authorized then FGR006SRB will make 2 beep sounds and generate finger error signal for 500ms of low active pulse. (Open Collector)

※ **Note:** Please read the PRG2000B software manual for writing personal IDs and the fingerprint templates to proximity cards.

10. FCC Registration Information

FCC REQUIREMENTS PART 15

Caution: Any changes or modifications in construction of this device which are not expressly approved by the responsible for compliance could void the user's authority to operate the equipment.

NOTE: This device complies with **Part 15 of the FCC Rules**.

Operation is subject to the following two conditions;

1. This device may not cause harmful interface, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a **Class A Digital Device**, pursuant to **Part 15 of the FCC Rules**. These limits are designed to this equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the radio or television off and on, the user is encouraged to try to correct interference by one or more of the following measures.

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on another circuit.
4. Consult the dealer or an experienced radio/TV technician for help.

11. Warranty Policy and Limitation of Liability

IDTECK warrants this product against defects in material and workmanship for the period specified below from the date of purchase under normal customer use. This Warranty doesn't apply: 1) to any product which has been dismantled without authorization of IDTECK or/and has a damaged or detached QC label on its back side; 2) to any losses, defects, or damages caused by improper testing, operation, installation, maintenance, modification, alteration, or adjustment; 3) to any product with a damaged or faded serial number on it; or 4) to any losses, defects, or damages caused by lightning or other electrical discharge, natural disaster, misuse, accident or neglect.

This Limited Warranty is in lieu of all other warranties, obligations, or liabilities on the part of IDTECK, and IDTECK DISCLAIMS ANY AND ALL WARRANTY, WHETHER EXPRESS OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IDTECK does not, and cannot, know who is present, what property is located, where this product will be used; it would be extremely difficult to determine the actual damages that may result from a failure of the product to perform as anticipated; and the low price of this product is based upon the nature of the product provided and the limited liability that IDTECK assumes. IDTECK IS NOT RESPONSIBLE FOR ANY PERSONAL INJURY, PROPERTY DAMAGE OR LOSS, DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR OTHER LOSS, AND IDTECK'S MAXIMUM LIABILITY SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT.

To obtain repair or replacement under the terms of this warranty, visit IDTECK's Website (<http://www.idteck.com>) and place an online RMA request. After an RMA code is issued, return the product along with the authorization RMA code.

>> Warranty Period

	Product Category	Warranty Period
1	RF CARD (Active type)	1 year
2	RF READER / FINGERPRINT READER	3 years
3	STANDALONE CONTROLLER	
4	CONTROL PANEL	
5	FINGERPRINT CONTROLLER	
6	MOLDED RF READER (RF10, RF20, RF30, RF TINY, IP10, IP20, IP30, SR10E, SR10UE, SR10SE, SR10RWE, SR10BE)	Lifetime
7	RF CARD (Passive type) (IDC80, IDC170, IDK50, IMC125, LXX50, IPC80, IPC170, IPK50, ISC80, ISC80S, ISK50, IMC135, IHC80, IP100, IP200)	

RMA REQUEST FORM

IDTECK accepts only on-line RMA requests on our Website (www.idteck.com). Please provide us with basic information in the below form so that we can understand your problems better. Send us back this form with your products after an RMA code is issued on our Website. This form is not compulsory.

RMA Authorization Code :	
1. Company Name	
2. Model Name	
3. Serial No.	
4. Original Invoice No.	
5. Distributor	
6. Purchasing Date	
7. RMA Request Date	

Please check your problems.

☐ Card Reading	☐ Power	☐ Keypad
☐ Communication	☐ Relay	☐ LCD
☐ LED & Buzzer	☐ Registration	
☐ Others :		

IDTECK RMA Center >>

3F, 10/10-1/10-2, Dodang-Dong, Weonmi-Gu, Bucheon-Si, Gyeonggi-Do 157-030, Korea
Telephone: 82.2.2659.0055 (HQ) / 82.32.671.5642 (RMA Center)
Fax: 82.2.2659.0086 (HQ) / 82.32.671.5641 (RMA Center)
Website: www.idteck.com
e-Training Center: www.idtecktraining.com



The specifications contained in this manual are subject to change without notice at any time.

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