

## TF1700 Quick Start Guide



### Features:

- Water-proof IP65 rated reader for outdoor installation
- Standard Weigand Input and Output interfaces are compatible with most 3<sup>rd</sup> party 26-bit Weigand readers and access control panels.
- USB HOST port makes offline data backup/management fast & easy.
- Relay contacts for alarm, electric lock, exit button, and wired door bell.
- Reads fingerprint, RFID card and Password.

### Specifications:

Fingerprint capacity	3000
Card capacity	30,000
Transaction capacity	100,000
Hardware Platform	ZEM700
CPU	ZK 6001, 400Mhz
Memory	8M Flash, 32MSDRAM
Fingerprint Sensor	ZK optical sensor
Display	16 CHAR x 4 Lines Black & White OLED Display
LED Indicator	Red, Green
Communication	Ethernet (10/100M) and RS485,
Weigand signal	Weigand Input and Weigand Output
Identification speed	≤2 sec
FAR	≤0.0001%
FRR	≤1%
Operating Temperature	32-113°F 0-45°C
Operating Humidity	20%-80%
Language	English/Spanish,
Power Supply	12V DC, 3A
Access control interfaces	Electric lock, alarm, exit button, wired door bell
Dimension	5.8 * 2 * 1.3 inches 62.5*185*41.5mm (L*W*D)

## Basic Contents:

 <p>TF1700 Fingerprint Terminal</p>	 <p>Metallic Mounting Plate</p>	 <p>Wall Mounting Screws and Holders</p>
 <p>Star-shape Screw for Mounting Plate</p>	 <p>Star-shape Screw Driver</p>	 <p>Mini-USB Cable</p>
 <p>Software CD</p>	 <p>Installation Guide</p>	 <p>Mounting Paper</p>

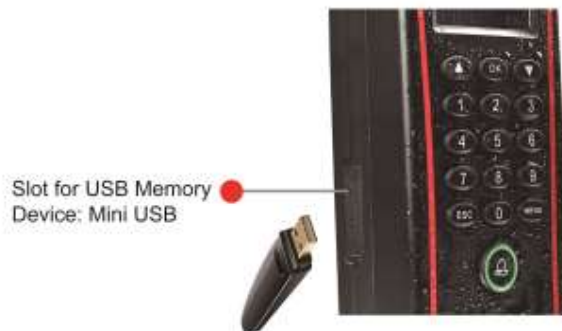
## Optional Accessories

 <p>FR1200 Fingerprint Slave Reader</p>	 <p>K1 Exit Button</p>	 <p>12V3A Power Adaptor</p>
 <p>Mifare Integrated Module and Card</p>		

## Front



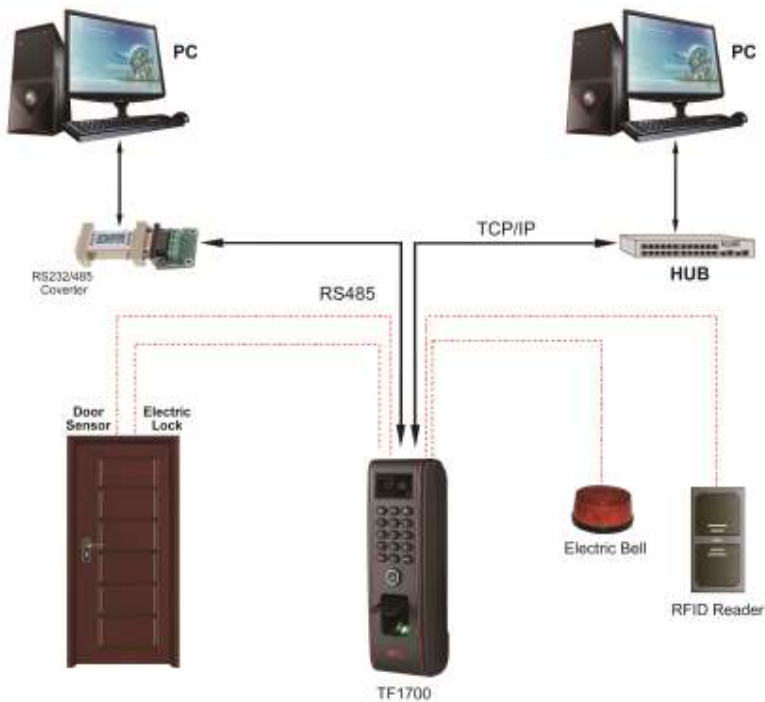
## Side



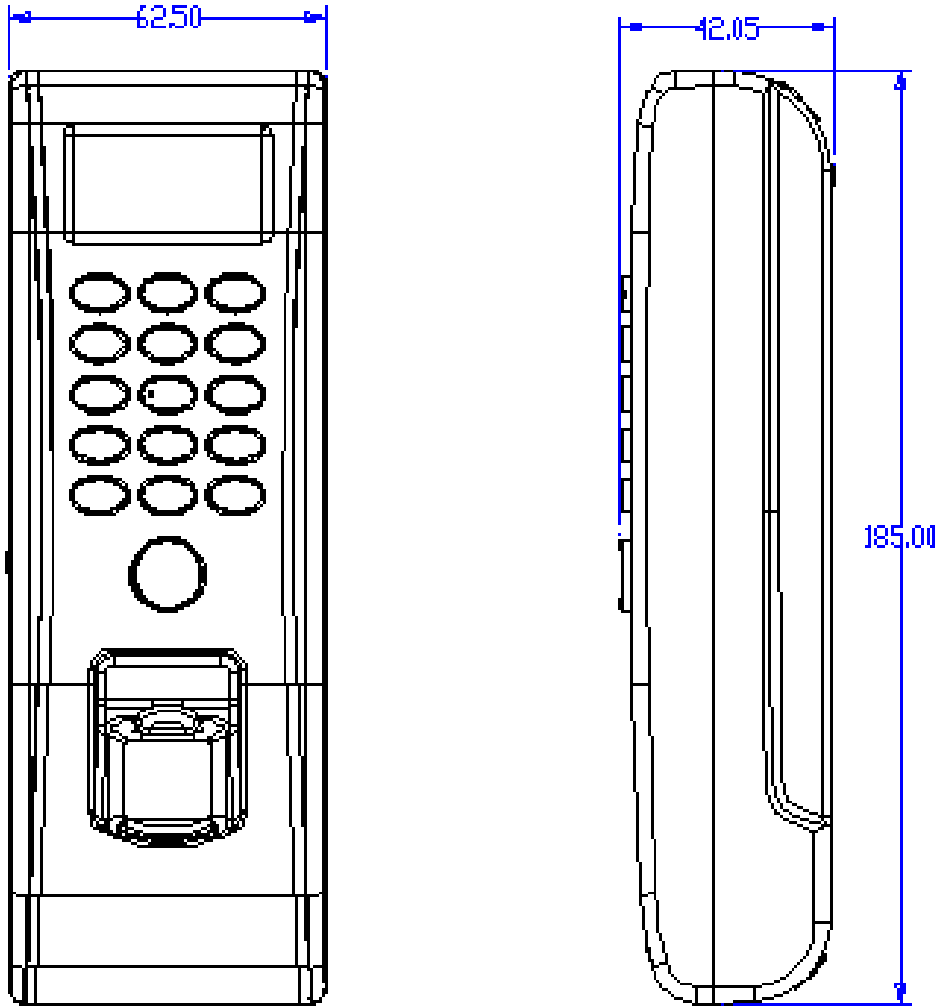
## Rear



## Installation Diagram



## Product Dimensions (mm)



## Cable Specification

PIN	Description	Wire
1	+12V DC	RED
2	GND	GREEN

PIN	Description	Wire
1	RJ45-1	YELLOW
2	RJ45-2	GREEN
3	RJ45-3	RED
4	RJ45-6	BLACK

PIN	Description	Wire
1	Weigand output D0	GREEN
2	Weigand output D1	RED
3	GND	BLACK
4	RS485+	BLUE
5	RS485-	YELLOW

PIN	Description	Wire
1	NO1	BLUE
2	COM1	RED
3	NC1	YELLOW
4	NO2	ORANGE
5	COM2	GREEN

PIN	Description	Wire
1	BELL-	PURPLE
2	BELL+	BROWN
3	DOOR SENSOR	WHITE
4	GND	BLACK
5	EXIT BUTTON	GREY

PIN	Description	Wire
1	+12V DC	RED
2	GND	BLACK
3	Weigand input D0	WHITE
4	Weigand input D1	GREEN
5	Red LED	BLUE
6	Green LED	GREY
7	Beep	PURPLE

## Important Notes

- Use regulated 12V DC 3A power source (supplied from control panel or separately purchased power supply).
- Please make sure to protect TF1700 against vandalism.

## Mounting the Unit

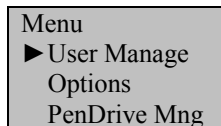
- Place the unit approximately 5 ½ feet above the ground level if permissible so that the users are comfortable in using the reader with least chances of error
- Pull the power and network cables from the back of the wall and connect them to the appropriate pigtail wires supplied with the reader
- Remove the screw at the bottom of the reader to detach the back plate.
- Install the back plate of the unit on to the wall and connect the power, network and other necessary cables on the back of the unit.
- Secure the reader with the back plate by fixing the tamper proof screw at the bottom of the reader.

## Hardware Setup

- Power on the reader by supplying 12V DC to the power and GND pins on the back of the reader. The power supply is not supplied with the reader. Please make sure that the power requirements are strictly met to avoid permanent damage to the reader.
- After the reader is powered on, the display will show the date, day and time on the screen.

## Date and Time Setup

To change the date and time, press the Menu key;  
The Menu will then display.



Scroll with the ▲/▼ keys and place the cursor (►) alongside “Options”. Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (►) alongside “System Opt”. Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (►) alongside “Date Time”. Press the **OK** key.

Once in the YYYY-MM-DD 24H screen, use the ▲/▼ keys to move between data fields.

Set the data and time.

Press the **OK** key to accept changes.

Press the **ESC** key to cancel changes.



## **Fingerprint Enrollment:**

Users have No "administrative" access to the TF1700, but can gain door access and have his/her attendance recorded.

Note:

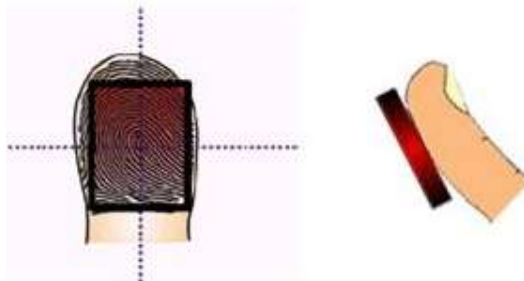
Until an "admin" is enrolled in the TF1700, All "users" enrolled on the TF1700 "temporarily" have administrative access. Therefore it is important to enroll an "admin" on the TF1700 soon after initial installation.

"Users" can enroll with three credentials;

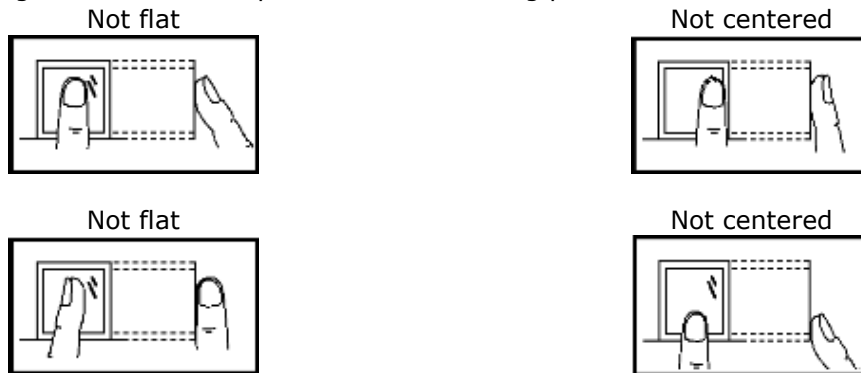
- Fingerprint
- RFID card
- Password

### **Suggestions for proper finger placement:**

- The user's finger should completely cover the sensor. The finger should be placed flat and in the center of the sensor. The finger should cover at least 80% of the sensor as shown below:



- The finger should NOT be placed in the following positions:



## Enroll Fingerprint (for Users)

To start fingerprint enrollment, press the Menu key on the TF1700.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "User Manage". Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "Enroll User". Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "Enroll FP". Press the **OK** key.

The TF1700 will prompt you;

```
EnrollFP
New Enroll?

ESC          OK
```

If this is a NEW User, then press **OK**.

The TF1700 will then prompt you with the next available User ID.

```
New Enroll

UserID: 000000001
ESC          OK
```

If no user has yet been enrolled on the TF1700, the next available User ID will be 000000001.

Press the **OK** key to accept 000000001, or manually key in a different number if desired.

The TF1700 will then prompt;

```
New Enroll
000000001-0
Place Finger...
ESC/EXIT
```

Place your finger on the sensor for 1 second.

After the TF1700 scans your fingerprint successfully, it will "beep" and then prompt you briefly with;

```
New Enroll
000000001-0
Remove Finger
ESC/EXIT
```

Then you will be prompted;

```
New Enroll
000000001-0
Second Press
ESC/EXIT
```

Remove your finger, and then place your finger on the sensor a 2<sup>nd</sup> time. Again, you will be prompted briefly;

```
New Enroll
000000001-0
Remove Finger
ESC/EXIT
```

Remove your finger, and then place your finger on the sensor a 3<sup>rd</sup> and final time. You will then be prompted;

```
New Enroll
000000001-0
ESC    OK(Save)
```

Press the OK key to accept the newly enrolled finger.

UserID 000000001 has now been successfully enrolled with one fingerprint.

The TF1700 will then prompt you with;

```
New Enroll
Continue?
ESC    OK
```

If you wish to continue enrolling additional users, press the OK key and follow the same procedures.

If you're finished enrolling additional users, press the ESC key.

When pressing ESC key, the TF1700 will prompt you;

```
Backup Enroll

UserID:000000001
ESC    OK
```

If you wish to add a "backup finger" for UserID 000000001 press the OK key.

**Note:**

Ideally, we recommend enrolling two fingers of each hand so that in case of injury of one hand the user can use the finger of the other hand as a backup. It is recommended to enroll left or right index finger and left middle or right middle fingers.

After enrolling one or more fingerprints to UserID 000000001 press the ESC key.

You will note pressing the ESC key takes you back to the previous menu;

Continue pressing the ESC key until you return to the Start-Up window;

Test the newly enrolled fingerprint by having UserID 000000001 place his/her finger on the sensor.

If successful, the TF1700 will prompt with a beep, and the screen will display;

```
Verify
UserID 000000001

Verified
```

**Note:**

The TF1700 will make a note in its transaction log that UserID 000000001 accessed the TF1700.

This information can be used for Time & Attendance software applications and/or for door access.

## Note:

If the fingerprints of certain users are unable to be enrolled successfully, you may use the Enroll Pwd or Reg RFID option for those users instead of Enroll FP.

This will allow the user to choose RFID card or password instead of his/her fingerprint.

Once all the users are enrolled, it is advised to enroll a system Admin.

Once an admin is enrolled, normal user will no longer be able to access the Menu and make unauthorized changes.

The enrollment procedure for admin is same as for user. But instead of selecting Enroll User, scroll down and select Enroll Admin.

Press the Menu key to begin;

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "User Manage". Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "Enroll Admin". Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "Enroll FP". Press the **OK** key.

Press OK to accept the default User ID, or manually enter a preferred User ID and press OK.

### Remove Enrolled User

Press the Menu key to begin;

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "User Manage". Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "Delete". Press the **OK** key.

The TF1700 will prompt you to confirm you wish to delete the fingerprint. Press OK

The TF1700 will prompt you to confirm you wish to delete the User. Press OK

The TF1700 will prompt you to confirm you wish to delete the User again. Press OK

## **Set Communications Options:**

Press the Menu key to begin;

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "Options". Press the **OK** key.

Scroll with the ▲/▼ keys and place the cursor (▶) alongside "Comm Opt". Press the **OK** key.

Available communication options will display;

- Baud Rate
- Device number
- Net Speed
- IP address

- Net Mask
- Gateway

Scroll with the ▲/▼ keys and place the cursor (▶) alongside the desired Comm option. Press OK.  
Enter additional communication settings, each time pressing OK to accept.

### Note:

Set the Dev num as 1

If you have more than one terminal being installed, make sure each terminal has a unique device number.

Set the IP addr for the TF1700 if you are using TCP/IP connectivity.

Record the IP address of each TF1700 you have installed.

These IP addresses are used to identify the TF1700s.

If using the Serial communication then match the TF1700's Baud Rate with the serial port of the computer.