

PELEKIS

Design WiFi Touch Keypad + Card IP66

Complete Installation, App & Programming Manual



RFID / Keypad access control with WiFi video calling and Wiegand interface

1. Product Overview

The device is a single-door multifunction standalone access controller and Wiegand reader with WiFi video calling. It combines local RFID/PIN access control with remote management through the Tuya Smart application.

Main Features

- Metal anti-vandal housing; outdoor design, IP65
- WiFi video calling through the app
- Touch keypad (keypad version)
- One relay output (NO/NC/Common) with pulse or toggle operation
- Up to 1,000 local users: 990 common + 10 visitor users
- Up to 500 users managed through the app
- PIN length: 4-6 digits (8888 is reserved)
- 125 kHz EM and 13.56 MHz Mifare card support
- Tri-colour LED status indication and buzzer
- Wiegand input/output; can operate as controller or reader
- 12-18 VDC supply
- Dimensions: 142 x 48 x 22 mm
- 3 MP video, approximately 85° lens, IR illumination
- Tuya Smart application; two-way communication

Specifications

Item	Specification
User capacity	1000 total; 990 common + 10 visitor
Operating voltage	12-18 VDC
Working current	≤150 mA
Idle current	≤60 mA
Card technology	125 kHz EM / 13.56 MHz Mifare
Read range	2-6 cm
Relay	NO, NC, Common; 0-99 s, default 5 s; 2 A max
Wiegand - EM	26-44 bit input/output; factory default 26 bit
Wiegand - Mifare	26-44, 56, 58 bit input/output; factory default 34 bit
PIN output	4 bit, 8 bit ASCII, or 10-digit virtual number; default 4 bit
Operating temperature	-40 to 60 °C; fingerprint version -30 to 60 °C
Operating humidity	0-92% RH
Housing	Zinc alloy, silver/black
Unit / shipping weight	315 g / 410 g

2. Wiring & Installation

Wire Functions

Wire	Function	Notes
Red	DC+	12-18 VDC power input
Black	GND	Negative pole
Blue	Relay NO	Normally open relay output
Brown	Relay Common	Common relay connection
Grey	Relay NC	Normally closed relay output
Yellow	OPEN	Request-to-exit (REX) input
Green	Data 0	Wiegand D0
White	Data 1	Wiegand D1
Important: When a common power supply is used with an electric lock, install the supplied 1N4004 (or equivalent) flyback diode across the lock as shown in the manufacturer wiring diagram.		

Mechanical Installation

- Remove the back cover from the unit.
- Drill the two fixing holes (A and C) and one cable hole (B).
- Insert the supplied wall anchors.
- Fix the back cover firmly to the wall.
- Thread the cable through hole B.
- Attach the unit to the back cover.

3. Tuya Smart App Setup

Create an Account

- Connect the phone to the WiFi network where the device will be installed.
- Download and install Tuya Smart.
- Open the app and select Create New Account / Sign Up.
- Enter your email address and request the verification code.
- Enter the verification code received by email.
- Create the password for the account and continue to the app.

Add the Device

- Power the access control unit.
- Enable Bluetooth on the phone.
- Tuya Smart should automatically discover the nearby WiFi Access Control device; select Add. If not, use Add Device from the main menu.
- Select the required WiFi network and enter its password.
- Wait for pairing to complete, then rename the device if required and select Done.

Main App Functions

- Press and hold the unlock control to release the door.
- Video surveillance / live view and remote unlock.
- Member management for system administrators/users.
- Temporary code creation.
- Device settings, WiFi signal indication and device information.

Temporary Codes

- Cyclic: creates a user/code with a programmable validity period and repeating schedule.
- Once: creates a one-time user/code valid for activation within 6 hours.
- Set code name, effective date/time, expiry date/time, repeat days, start/end time and PIN. A random PIN can be generated automatically.
- After saving, the code information can be shared by message, email, copy or other supported phone sharing methods.
- In Log Record, press and hold a code entry to Delete, Edit validity limits or Rename it.

App Settings

- Remote unlock setting: enable/disable remote door release.
- Permission settings: select user access permissions.
- Automatic lock: enable automatic locking after the configured time.
- Auto lock time: set the delay before relocking.
- Alarm time: available device alarm setting.
- Key volume: adjust keypad sound level.

4. Local Programming Basics

Factory default Master Code: 123456. Enter programming mode with * (Master Code) #. Exit programming mode with *.

Change Master Code

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Update Master Code	0 (New Master Code) # (Repeat New Master Code) # Master code must be 6 digits.
3. Exit	*

Set Working Mode

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Standalone / Controller Mode	77 # (factory default)
OR - Wiegand Reader Mode	78 #
3. Exit	*

5. User Management

User ID Allocation

- Fingerprint version: fingerprint user IDs 0-98; card user IDs 100-989; master fingerprint ID 99; visitor IDs 990-999.
- Keypad/RFID versions: PIN/Card user IDs 0-989; visitor IDs 990-999.
- Leading zeros are not required. Keep a record of user IDs because later modifications/deletions may require them.

Add Fingerprint User

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Auto ID	1 (Fingerprint) (Repeat Fingerprint) (Repeat Fingerprint again) Fingerprints can be added continuously.
OR - Specific ID	1 (User ID) # (Fingerprint) (Repeat Fingerprint) (Repeat Fingerprint again)
3. Exit	*

Add Card User

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Auto ID	1 (Read Card) / (Input 8/10/17-digit Card Number) # Cards can be added continuously.
OR - Specific ID	1 (User ID) # (Read Card) / (Input 8/10/17-digit Card Number) #
OR - Block Enrollment	1 (User ID) # (Card Quantity) # (First Card 8/10/17-digit Number) # Card numbers must be consecutive; up to 890 cards.
3. Exit	*

Add PIN User

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Auto ID	1 (PIN) #

	PINs can be added continuously.
OR - Specific ID	1 (User ID) # (PIN) #
3. Exit	*

PIN Security (6-digit PIN only)

For higher security, a correct 6-digit PIN can be hidden within additional digits, up to a total of 10 digits. Example PIN 123434 may be entered with extra digits before or after it. This feature applies to the keypad version only.

Add Master Fingerprint (ID 99)

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Master Fingerprint	1 (99) # (Fingerprint) (Repeat Fingerprint) (Repeat Fingerprint again)
3. Exit	*

Visitor Users

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Add Visitor Card	1 (User ID) # (0-9) # (Read Card / Card Number) #
OR - Add Visitor PIN	1 (User ID) # (0-9) # (PIN) # 0-9 = permitted uses; 0 = 10 uses.
3. Exit	*

Change PIN (outside programming mode)

Programming Step	Keystroke Combination
Change PIN	* (User ID) # (Old PIN) # (New PIN) # (Repeat New PIN) #

Delete Users

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Delete by credential	2 (Fingerprint) / (Read Card) / (Input PIN) # Users can be deleted continuously.
OR - Delete by User ID	2 (User ID) #
OR - Delete by Card Number	2 (Input 8/10/17-digit Card Number) #
OR - Delete ALL Users	2 (Master Code) #
3. Exit	*

6. Access & Relay Configuration

Set Relay Configuration

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Pulse Mode	3 (1-99) # Relay time = 1-99 seconds; default 5 seconds.
OR - Toggle Mode	30 # Relay toggles ON/OFF.
3. Exit	*

Set Access Mode

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Fingerprint Access	40 # (fingerprint version only)
OR - Card Access	41 # (factory default for RFID version)
OR - PIN Access	42 # (keypad version only)
OR - Multi User Access	43 (2-9) # Door opens after 2-9 valid users; interval between reads must not exceed 5 seconds.
OR - Fingerprint/Card/PIN Access	44 # (factory default for fingerprint/keypad versions)
3. Exit	*

Strike-out Alarm

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Strike-Out OFF	60 # (factory default)
OR - Strike-Out ON	61 # After 10 failed attempts, access is denied for 10 minutes; exit button remains usable.
OR - Strike-Out ON (Alarm)	62 #
Set Alarm Time	5 (0-3) # (factory default is 1 minute)
3. Exit	*

Audible & Visual Response

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Disable / Enable Sound	70 # / 71 # (71 factory default)
LED Always OFF / ON	72 # / 73 # (73 factory default)
Keypad Backlight Always OFF / ON	74 # / 75 #
Keypad Backlight Automatic OFF	76 # (factory default) Turns off after 20 s and wakes with any key.
3. Exit	*

7. Normal Operation & Factory Reset

- Open door: present a valid fingerprint/card or enter a valid user PIN followed by #.
- Remove alarm: enter Master Code #, use Master Fingerprint/Card, or present a valid user credential.

Factory Reset & Master Card

- Power off the device.
- Press and hold the Exit button, then power on.
- After two beeps, release the Exit button. The LED turns yellow.
- Present any 125 kHz EM or 13.56 MHz Mifare card. The LED turns red: factory reset is complete and that card becomes the Master Card.
- If no Master Card is to be added, hold the Exit button for at least 5 seconds before release; this invalidates the previously registered Master Card.
- User information is retained after factory reset.

Master Card / Master Fingerprint Usage

Programming Step	Keystroke Combination
Add users	1. Present Master Fingerprint/Card. 2. Present fingerprint/card or enter PIN # three times as required by the credential type. Repeat for more users.

	3. Present Master Fingerprint/Card again.
Delete users	1. Present Master Fingerprint/Card twice within 5 seconds. 2. Present fingerprint/card or enter PIN #. Repeat for more users. 3. Present Master Fingerprint/Card again.

8. Controller Mode & External Readers

In Controller Mode the unit can control the lock while accepting credentials from an external Wiegand reader. Factory default Standalone/Controller mode is selected with 77 #.

Wiegand Input Formats

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. EM Card Input Bits	8 (26-44) # (factory default 26 bits)
2. Mifare Card Input Bits	80 (26-44, 56, 58) # (factory default 34 bits)
3. Disable / Enable Parity Bit	80 # / 81 # (81 factory default)
4. Exit	*

For Wiegand readers with 32, 40 or 56-bit output, disable parity bits.

External Reader Notes

- With EM/Mifare card readers, users may be added/deleted on either the device or the external reader.
- With HID card readers, users can only be added/deleted on the external reader.
- For an external fingerprint reader (e.g. SF1), enroll the fingerprint on the external reader first, then add the same fingerprint on this device using Auto ID or a specified User ID.

External Keypad Reader

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. PIN Input Bits	8 (4 or 8 or 10) # Factory default 4 bits.
3. Exit	*

4 = 4-bit output; 8 = 8-bit ASCII; 10 = 10-digit virtual number. PIN users can be added from either the device or external keypad after entering programming mode.

9. Wiegand Reader Mode

Select Reader Mode with 78 # to use the device as a standard Wiegand reader connected to a third-party controller. In this mode, most Controller Mode settings become invalid. The yellow wire is redefined as buzzer control; a low input causes the buzzer to sound.

Wiegand Output Formats

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. EM Card Output Bits	8 (26-44) # (factory default 26 bits)
2. Mifare Card Output Bits	80 (26-44, 56, 58) # (factory default 34 bits)
PIN Output Bits	8 (4 or 8 or 10) # (factory default 4 bits)
3. Disable / Enable Parity Bit	80 # / 81 # (81 factory default)
4. Exit	*

10. Advanced Application

Collection Card Mode

When Collection Card Mode is ON, any presented card can open the lock and is simultaneously added to the device.

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Collection Card Mode OFF	92 # (factory default)
OR - Collection Card Mode ON	93 #
3. Exit	*

Reset WiFi

Programming Step	Keystroke Combination
1. Enter Program Mode	* (Master Code) #
2. Reset / Update WiFi association	9 (Master Code) #
3. Exit	*

After resetting WiFi, the device is removed from the app and must be added again.

11. Quick Reference

Programming Step	Keystroke Combination
Enter programming mode	* (Master Code) #
Exit programming mode	*
Change Master Code	0 (New Code) # (Repeat New Code) #
Add Card - Auto ID	1 (Read Card) #
Add PIN - Auto ID	1 (PIN) #
Delete by Card	2 (Read Card) #
Delete by PIN	2 (PIN) #
Pulse Relay	3 (1-99) #
Toggle Relay	30 #
Card-only access	41 #
PIN-only access	42 #
Card/PIN access	44 #
Sound OFF / ON	70 # / 71 #
Standalone/Controller mode	77 #
Wiegand Reader mode	78 #
Collection Card OFF / ON	92 # / 93 #

12. Safety & Commissioning Notes

- Disconnect power before wiring.
- Verify supply polarity and voltage before energising the unit.
- Use the flyback diode when required for the lock and power-supply arrangement.
- After installation, test local access, exit button, relay timing, app unlock, video call, alarm response and recovery after power loss.
- Record the Master Code and assigned User IDs securely for future maintenance.