# PRODUCT

# BOOKLET

## Uface 7T Lite

( OS-M375K1-C-S23N )

## Dear customer:

Thank you for using our product. For better use, please carefully read this instruction. If you have any issues not mentioned here, please contact the provider. All parts of this booklet are reserved by our company, including words, pictures and graphics. Without written permission, no unit or individual shall extract, copy, translate or edit the content in this instruction.

## Device introduction

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Platform/Software operating instruction

Appearance description

## Installation

Illumination intensity

Position
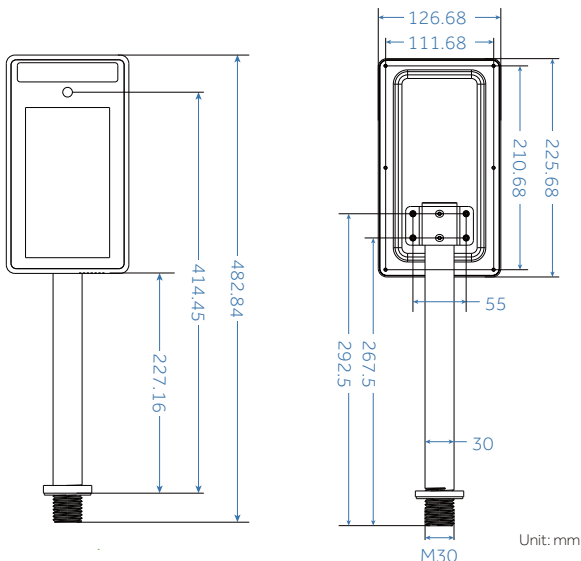
Height

Steps

Wiring connection

## Product description

Features

FAQ

## Parts list

| No. | Name | Quantity |
|-----|------|----------|
| 1 | Host | 1 |
| 2 | Power adapter - 100-240V to 12V-2A | 1 |
| 3 | Certificate | 1 |
| 4 | Warranty card | 1 |
| 5 | Silicone top-plug, Silicone rear-plug | 1 |
| 6 | Nut | 1 |
| 7 | Round head screw | 4 |

## Dimensional drawing



126.68
111.68
225.68
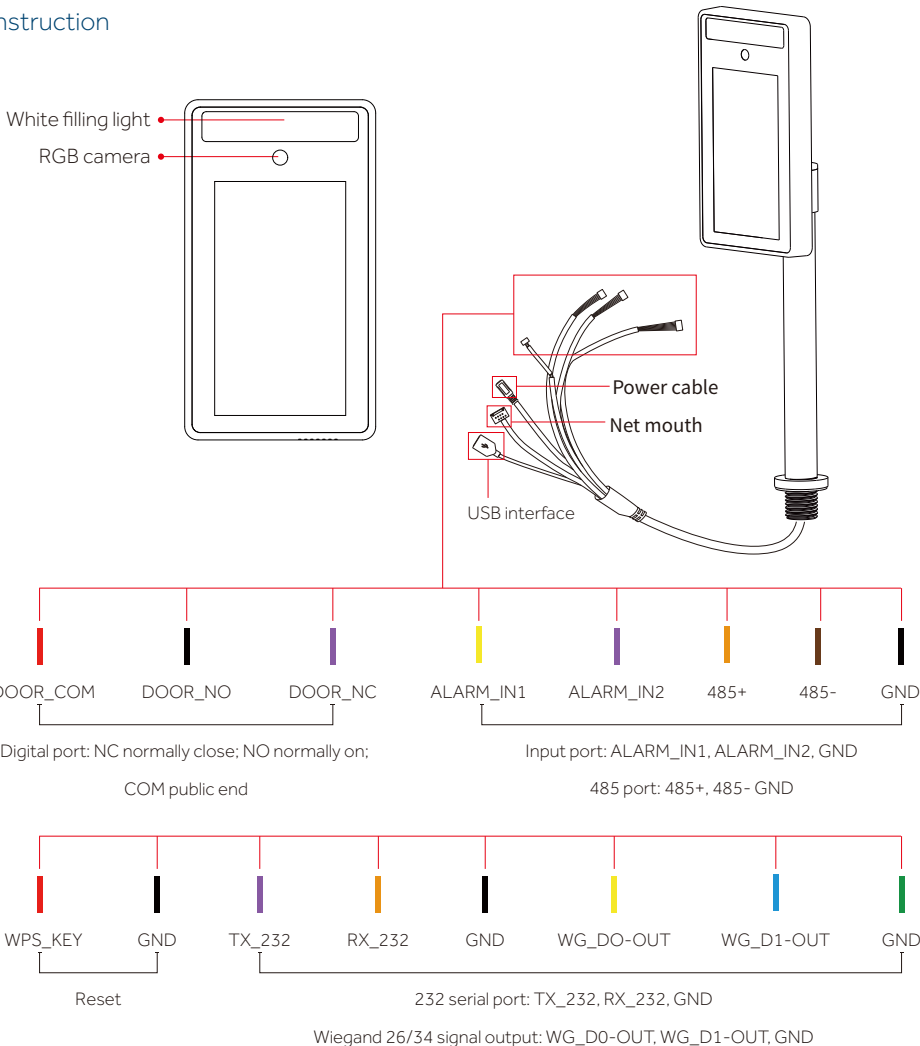210.68
482.84
414.45
227.16
267.5
292.5
55
30
M30

Unit: mm

## Operating instruction

The software carried by the product divides into 2 versions: WO (WO platform, provides the secondary development) and LAN (LAN or offline version, provides the secondary development). Please mark the need for software version when place the order. Please contact the customer service for another version if required. For more detailed platform/software instruction manual, please login into the official website to download or contact the customer services.

## Appearance description

### Instruction



White filling light
RGB camera

Power cable
Net mouth
USB interface

DOOR_COM    DOOR_NO    DOOR_NC    ALARM_IN1    ALARM_IN2    485+    485-    GND

Digital port: NC normally close; NO normally on;
COM public end

Input port: ALARM_IN1, ALARM_IN2, GND
485 port: 485+, 485- GND

WPS_KEY    GND    TX_232    RX_232    GND    WG_DO-OUT    WG_D1-OUT    GND

Reset

232 serial port: TX_232, RX_232, GND

Wiegand 26/34 signal output: WG_D0-OUT, WG_D1-OUT, GND

The recognized face, of which, the illumination intensity ( "intensity" in short) shall not be lower than 30 Lux. The device has filling light itself, so when the device put in a totally dark environment, the face illumination intensity, 0.5m distance to the device, is about 100 Lux. The nearer to the device, the higher the intensity is. If there is overexposure on the face, the face characteristics will be unable to be extracted and may lead to hard recognition.
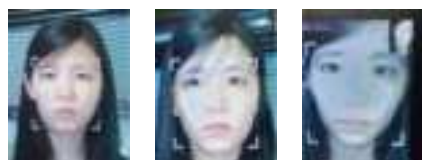
### Intensity test

The test standard is as shown on the picture: the angle between dotted line A and dotted line B is 90 °, the test adopts the common light meter with full spectrum, and applies U30 standard light source; adjust the distance between source light and test object, subject to the illumination intensity of the object's face at this time.
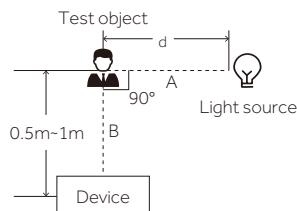


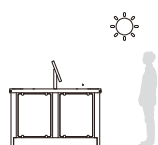### Reference to intensity



30 Lux, dim  50 Lux, normal

100 Lux, bright  300 Lux, slight exposure  500Lux, overexposure

## Illumination intensity in actual scenarios

Light issues may lead to big differences between site image and registered image; backlight, side-light and strong light will influence the recognition experience. (Analysis: from the view of human eyes, the color changes on face skin may result in wrong recognition of identity; unclear exposure area, no matter large or small, may influence the identity judgement.)

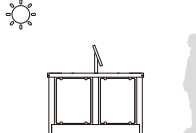### Side light

Light source is near the object | Side-light may lead to uneven light on the face



### Strong light

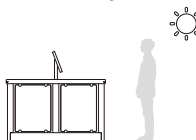Device stands between the light source and object | Direct strong light may cause overexposure



### Back light

Object stands between the device and light source | Backlight may make the face too dark



### Improvements

1. Install the device in a place with little impact from light source.
2. Add a registered image according to the site condition, and it is suggested to use this product to enroll images.
3. Properly lower the threshold value according to usage.

## Position

Device shall be installed in places avoiding backlight, side-light and strong light.

- This place, 3m away from the window, or does not influenced by sunlight, can be considered for installation.
- Backlight, side-light or direct strong light, not suitable for installation.
- Other areas, install in suitable places according to actual light impact.

- Device
- Wall
- Glass window (same as the semi-outdoor scene with no walls)
- Person
- Curtain
- Light
- Door

### Sunlight shines indoor

When the sunlight shines indoor through the window, the face recognition terminal device shall not be installed in shown black shadow area, instead, shall be installed in place with little sunlight impact, no side-light and no backlight. (Glass window can be deemed as no walls)
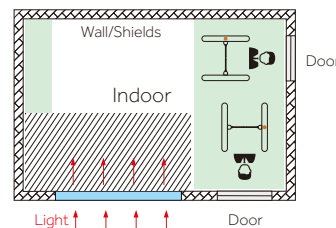


### Glass window

If the room has glass wall, there is no shield for sunlight, then it is suggested to hang curtains over the window, and install the device in place with shield to avoid direct sunlight influencing the recognition. (Glass window can be deemed as no walls)
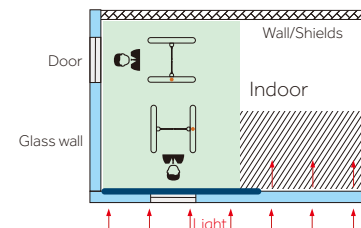


### Sunlight shines through the door, with glass window at one side

Sunlight shines through the door, the device shall be installed at the place with shields and little light impact. Glass window can be deemed as no shields, the device shall be installed at the side without glass window or with curtain hung.
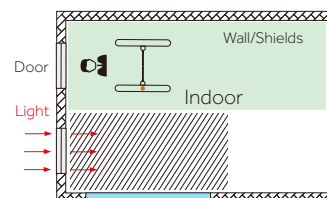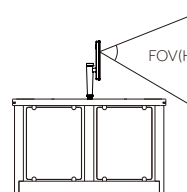


### Sunlight shines through the door

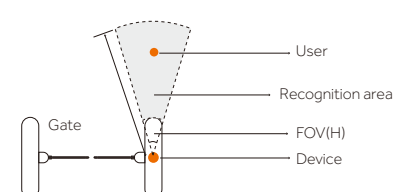Sunlight shines through the door, the device shall be installed at the place with shields and little light impact.
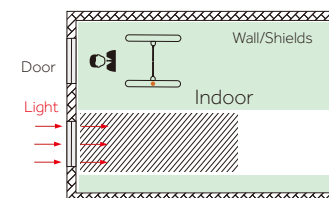


## Height

Camera vertical wide-angle



Camera horizontal wide-angle



- User
- Recognition area
- FOV(H)
- Device

Suggested installation height (the distance between the lens and the ground) is 1.4m, as the recognizable body height range, 0.5m distance away from the device, is 1.3m-1.7m; the recognizable body height range, 1m distance away from the device, is 1m-2m. (There are some deviations)

**1** According to the site requirements, drill a 35mm-diameter hole in the gate (commonly in the middle or the front), as shown on the picture, ⊕ is the suggested hole position.

Single-channel gate

Dual-channel gate
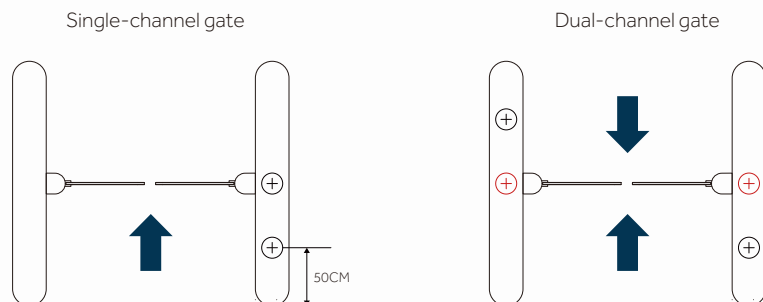
50CM

ⓘ Attention: Hole position should be decided by actual scenes and applied gate type, 50cm is the reference value only.

**2** Put the silicone rear-plug on the position shown on the picture, fix the column and host via screws, then put the silicone top-plug on specific position.

Silicone top-plug

Silicone rear-plug
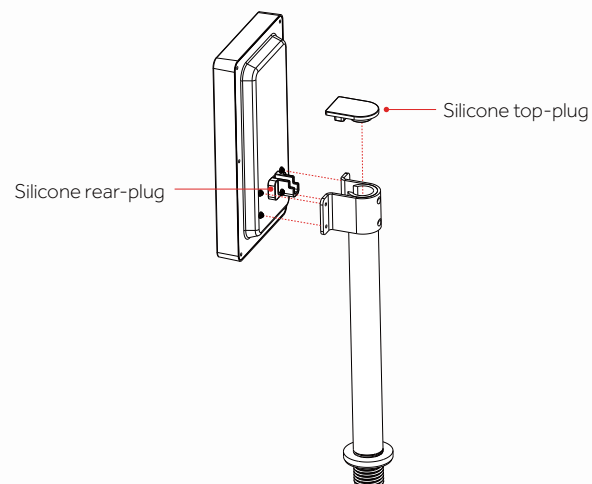
**3** Screw off the fixing nut at the column bottom, thread the cables through the nut.

Take down the nut
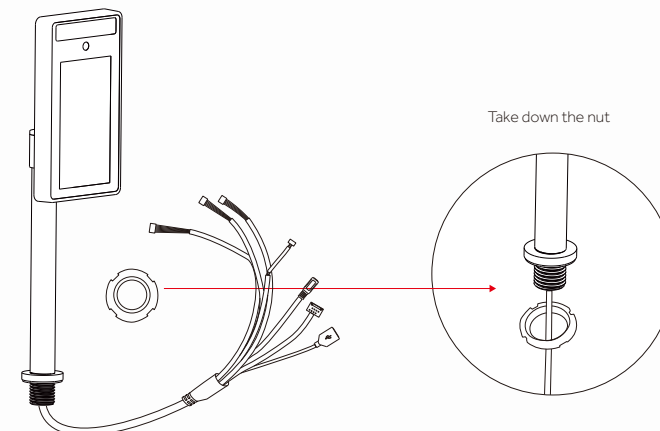
ⓘ Attention: a) At this time, do not connect cables such as network cable and power cable, to avoid the trouble of installation.
b) 4 cables cannot be threaded at once from the nut, please thread them one by one, shown as the picture.

**4** Insert the column and cables into the hole on the gate, from top to bottom. At the gate bottom, thread the cable interfaces out the nut one by one, align the nut with thread and then tighten.

Tighten the nut

## Wiring for automatic door

~100-240V

Auto-door controller + assembly units

Sensor (inside)

Relay interface

Host

DC12V    Ethernet
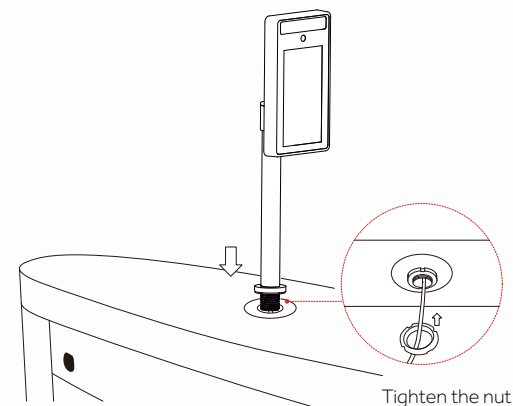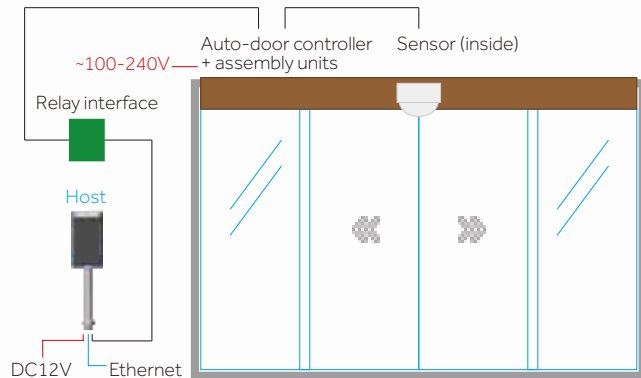
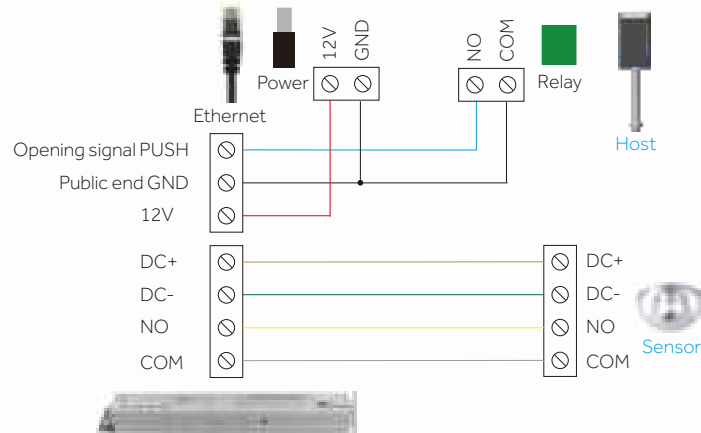System installation schematic drawing for automatic door

Power    12V    GND    NO    COM    Relay

Ethernet

Host

Opening signal PUSH

Public end GND

12V

DC+          DC+

DC-          DC-

NO           NO

COM          COM

Sensor

Controller of auto-door (only used terminals will be listed)

Wiring schematic drawing for sensor switch of automatic door

## Installation notes

1. When arrange the wires, if the 12V power supply cable of the host does not adopt the "Special power strip" and is in long distance, resulting in large resistance, then abnormal phenomena may occur easily such as insufficient voltage (≤11V), repeat restart, system crash and so on. Wiring connection of voltage metering is shown as follow.

Host

Voltage meter

V

Cable equivalent resistance1

GND

12V

Cable equivalent resistance2
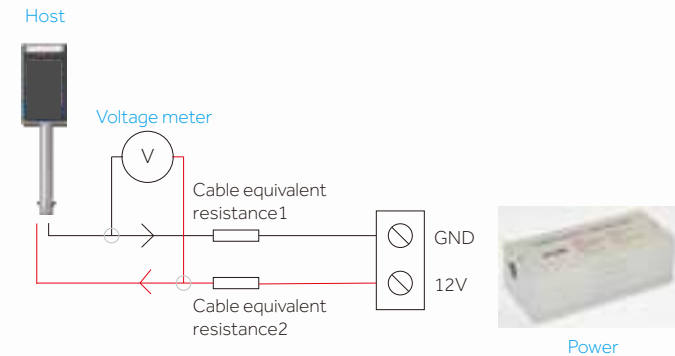
Power

2. Power adapter (brought with the device) of different countries are optional, such as European standard, American standard, British standard and so on.

- Extension of power cable (weak current) can not exceed 2m, otherwise, it may cause insufficient power supply for the host end, and abnormal phenomena like repeat restart, system crash and so on may occur. If the power is far away from the device, the power cable can be extended (strong current).
- If use other power adapter, 9V 1A as an example, then insufficient voltage and too weak current may cause repeat restart.
- The cable cannot be too fine (such as network cable and fine line), it is suggested to connect multi-strand cable in parallel or use copper core bold cable, to ensure voltage >11V.
  - ⓘ Attention: If use network cable, the extension cable uses 4-strand cable as positive pole and 4-strand cable as negative pole.
- If not clear with how to extend, please contact the provider to change "Special power strip".

## • Characteristics

Supports the night filling-light, cooperates with photosensitive sensor; the algorithm with dynamic face detection and recognition is based on video stream; the 1:N recognition accuracy is 99.99% under 0.1% false accept rate.

## • Store records in local

(a) Device using cloud platform supports storing 50 thousand pieces of face images (smaller than 400KB), 1 million pieces of recognition records (0.45KB) and about 10 thousand pieces of site capture images; (b) Device using LAN support storing 50 thousand pieces of face images (each image by 100KB) and 1 million pieces of recognition records (including the latest 10 thousand pieces of site capture images).

## • Quick recognition speed

Recognition speed less than 1s.

## • Secondary development (integrated)

Support the interface connection in HTTP; supports 232 serial output, Wiegand 26 and 34 output, custom the configuration of output content.

## • Complete functions

Supports recognition distance configuration; supports stranger detection; supports saving the site images of face recognition and stranger detection.

## • High extensibility

Supports deployment methods like public network and LAN; supports screen display content configuration; external card reader access and ID card reader.

## • Try to restart and reset

When the device stops in some interface for a long time, users can plug out the power switch, power-on reset and then restart. If it does not take effect, then can short circuit the tails or long press RESET button for 8-12s to restart the device. Besides, users can contact our staff and make some feedback.

## • Dustproof & Waterproof

This device possesses the protection grade of IP54.

## • Drop resistance

Please avoid operations such as falling, breaking, bending, heavily pressing and so on.

## • Cleaning

Please use soft cloth or such materials, lightly wipe the display screen or panel, and to avoid scrubbing with water and cleaner.

## • Low-temperature environment

The normal working temperature for this device is -10℃~50℃, if the actual temperature exceeds this range, that may influence the normal use of the device.

Do not dirty or damage the display screen with oil-water or sharp objects

Do not use unknown power adapter to avoid burning out the device

**CE Caution:**

For the following equipment:
Product Name: Face recognition terminal
Model: OS-M375K1-C-S23N

Trade Name: 宇泛智能

Universal Ubiquitous Co., Ltd.
E-mail: wangjianhao@uni-ubi.com

hereby declares that this [Name: Face recognition terminal, Model: OS-M375K1-C-S23N] is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

CE

Adapter shall be installed near the equipment and shall be easily accessible.
Only can use adapter as below:
Power Adapter Model: XED-RZ120200S
Input: AC100-240V, 0.6A, 50/60Hz; Output: DC12V, 2A
SHENZHEN XED POWER SUPPLY CO., LTD
The plug considered as disconnect device of adapter.

This product is intended for sale and application in a business environment.
RED Article 10 2
-This product can be used across EU member states
RED Article 10 10
-The product is class 1 product, No restrictions

**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

**FCC Warning**

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 interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.